THE IMPACT OF GROUP-LEVEL JUSTICE ON INDIVIDUALS' AFFECTIVE AND BEHAVIORAL REACTIONS TO UNFAIR EVENTS IN ORGANIZATIONS

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THE IMPACT OF GROUP-LEVEL JUSTICE ON INDIVIDUALS' AFFECTIVE AND BEHAVIORAL REACTIONS TO UNFAIR EVENTS IN ORGANIZATIONS

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The current dissertation research examines the role of group-level justice on individuals' behavioral and affective reactions to mistreatment in organizations. In the affective event model of organizational mistreatment proposed here, affective reactions to specific events are moderated by group-level justice and these affective reactions also mediate perceptions of mistreatment and subsequent behavioral reactions. As one of the important context variables, individuals use group-level justice as a reference point for their own evaluations of unfair events. Individuals under high levels of group-level justice perceive injustice from their experience of mistreatment more strongly than others because their norms and expectations are clearly violated. As a result of this, behaviors driven by strong negative affect felt by those under high group-level justice will be more likely, and behaviors driven by attitude (e.g. cynicism) will be more likely under low group-level justice. Using field survey data from 77 teams and 333 individuals, these theoretical propositions on the moderating role of group-level justice are examined. By examining the cross-level moderating effects of group-level justice and the differential effects of distinct negative emotions (anger vs. depression) on leading certain behavioral reactions, the current research contributes to a deeper understanding of how individual- and group-level factors interact in organizations.

BIOGRAPHICAL SKETCH

Yu Mi Seo was born on August 12, 1979 in Daegu, Korea. She graduated from Seoul National University, cum laude, with a B.A. in Psychology with International Relations as a minor. During her undergraduate program, she studied abroad as an exchange student in Political Science at Singapore National University, and travelled to many parts of the world before graduating in 2004.

She then attended the graduate program in the Korean Development Institute School of Public Policy and Management, Seoul, Korea. During her graduate studies, Yu Mi worked as an assistant director in the Center for Conflict Resolution and Negotiation at the KDI School, and also as an intern for six months in the Emerging Social Issues Division, United Nations Economic and Social Commissions for Asia and the Pacific, Bangkok, Thailand.

After graduating summa cum laude with a Master of Public Policy degree with a concentration in Social Policy in May 2005, Yu Mi came to the United States for the MS/PhD program in Organizational Behavior in the School of Industrial and Labor Relations at Cornell University, Ithaca, New York. During her graduate studies at Cornell, she received a Master of Science in Organizational Behavior in May, 2008 and worked as a summer intern at the Hay Group Seoul branch in 2009. During her field study in 2010, Yu Mi was married to Hyeon Goo Kim and then came back to Ithaca with her husband to prepare for the next step of their lives.

To my parents,

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who made all of this possible,
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LIST OF ABBREVIATION

Affective Events Theory (AET)
Procedural Justice Climate (PJC)
Distributive Justice climate (DJC)
Interactional Justice Climate (IJC)
Locus of Control (LOC)
Internal Locus of Control (I-LOC)
Power Locus of Control (P-LOC)
Chance Locus of Control (C-LOC)
Intra-class correlations (ICC)
Hierarchical Linear Modeling (HLM)

CHAPTER 1

INTRODUCTION

Study Overview

Organizational justice research has examined how people think about their rewards, the procedure used to make outcome decisions, and the people who deliver the outcomes and manage the process. The perception of fairness in these aspects of organizations constitutes an integral part of organizational life. On the other hand, research about emotions in organizations has shown that many work-related behaviors are influenced by employees' moods, emotions, and dispositional affect. As one of many work-related events, the experience of unfairness or injustice in the workplace is an emotionally laden process (Bies & Tripp, 1996). Affective events theory (Weiss & Cropanzano, 1996) posits that work events are proximal causes of affective reactions, and thus the experience of unfairness in the workplace is an important source of negative affective reactions.

The present research focuses on the impact of group-level justice on the formation of individual affective and behavioral reactions to unfair events. The perception of fairness and the emotions people feel are intuitively linked to each other, and thus the relationship between justice and emotion has been of interest to organizational researchers. Earlier research showed that those who are treated fairly will experience positive emotions, whereas those who are under-rewarded are likely to feel anger (Homans, 1974). Although the relationship between emotions and perceptions of fairness is thought to be natural and simple, research on the issue has

shown more complex patterns. While many researchers have focused on the role of justice perceptions as a cause of moods and emotions, other researchers considered affect to be a predictor of justice judgments. In addition, the construct of organizational justice itself is categorized into three specific types of justice (i.e., distributive, procedural, and interactional) that are often investigated separately, and the construct of affect varies depending on whether researchers focus on moods, trait affect, or distinct emotions. Moreover, much of the correlational research conducted in the field has found that emotions and justice perception mediate the relationships between justice events and other behavioral variables.

As for the level of research, most of the research on justice and emotion has been conducted at the individual level. However, the experience of justice in the workplace is shaped within that social context. When faced with injustice-triggering mistreatment, individual employees try to make sense of such situations through sensemaking with third party others, and seek to respond to the perceived mistreatment in various ways (Olson-Buchannan & Boswell, 2008). Therefore, interaction with other workgroup members, justice- related precedents in the workplace, characteristics of management by team leaders, and collective sensemaking processes are factors that might lead to the development of shared perceptions.

Despite this social nature of justice, group-level organizational justice has a fairly short history as a focus of research. Procedural justice climate (Naumann & Bennett, 2000) refers to distinct team-level cognition regarding how fairly the team as a whole is treated procedurally. Similar to procedural justice in meaning, team justice (Roberson & Colquitt, 2005) has focused more on the processes through which such

perceptions develop, with a special emphasis on the role of the interaction between team members, while justice climate has been conceptualized as similar to individual justice perceptions in their content and operations but with a focus on the unit as a referent.

The present research posits that individuals in a group use group-level justice as a reference point for their own evaluation of unfair events. While group-level justice is achieved through sensemaking and social influence (Roberson & Colquitt, 2005), it also works as a standard for individuals to make fairness judgments, such that individual members' affective and behavioral reactions are affected by pre-existing level of team justice in a group.

Developed from referent cognition theory, fairness theory (Folger & Cropanzano, 2001) posits that individuals evaluate behaviors based on counterfactual thinking, generating alternatives about what would have happened if the behavior had not occurred, whether the perpetrator could have behaved differently, and whether the perpetrator should have behaved the way he or she did. Group-level justice climate provides a strong basis for this line of thinking. Since perceptions of unfairness intensify in situations where the perpetrator could have avoided an injustice but did not, affective reactions following an experience of injustice will vary by group-level justice climate. The present research explores this affective mechanism that links group-level justice and individual-level reactions. Building on the affective events theory framework (Weiss & Cropanzano, 1996) and justice and emotion literature, the role of group-level justice in shaping affective and behavioral reactions to work events is examined.

Organizational Justice: Distributive, Procedural, and Interactional Justice

Earlier research on organizational justice focused on fairness perceptions about outcomes (*distributive justice*). There are various types of organizational outcomes, such as pay, promotion, or job security, about which people make judgments concerning the fairness of distributions using several standards. Equity is the representative fairness standard (Adams, 1965) and refers to the fairness of outcomes in relation to inputs of the individual employees. If an individual perceived his/her ratio of inputs to outcomes as different from another's ratio, the individual would experience distributive injustice. Later, this type of fairness was expanded to include allocation rules such as equality and need (Leventhal, 1976). Deutsch (1985) also argued that these fundamental rules of allocation can be measured in consideration of a particular situation. If an organization's goals are to instill a concept aligned with equality, the allocation rules should be different than if the organization's goals were focused more on need (e.g., increased productivity; Colquitt et al., 2001).

Researchers have suggested the injustice aspect of distributive justice as a predictor of affective, cognitive and behavioral outcomes (Cohen-Charash & Spector, 2001). Perception of distributive injustice triggers emotions, such as anger, unhappiness, frustration, and guilt (Weiss, Suckow, & Cropanzano, 1999) and cognitions, such as distortion of inputs to outputs (Adams, 1965), as well as behavior, such as performance or withdrawal (Cohen-Charash & Spector, 2001).

In addition to outcome fairness, Thibaut and Walker (1975) suggested that people evaluate the fairness of the processes or procedures others use in allocating relevant outcomes (*procedural justice*). With a focus on third party decision-making

within a legal context, they suggested that people want to exert some influence on the procedure. The perception of process fairness has been found to be important and in some cases it is considered to be the most important determinant in overall perception of organizational justice (Lind & Tyler, 1988). People are more willing to accept unjust outcomes if the procedure that determined the allocation was fair. This finding of "process control effect" is one of the most replicated results in the literature (Colquitt et al., 2001).

Beyond the process control effect, research on the structural features of the process has been conducted with reference to Leventhal's six rules for procedural justice, which include consistency, bias suppression, accuracy, correctability, representativeness, and ethicality (Leventhal, 1980). Compared to distributive injustice, procedural injustice is predicted to be related to cognitive, affective, and behavioral reactions that are directed more towards the organization rather than tasks or specific outcomes (Cohen-Charash & Spector, 2001). While an employee might still become upset, mad, or frustrated at an instance of procedural injustice, these affects are more commonly observed in reactions toward the organization as a whole. In particular, procedural justice has been empirically related to organizational commitment (Martin & Bennett, 1996; Mossholder, Bennett, Kemery, & Wesolowski, 1998).

Later, Bies and Moag (1986) asserted that people also assess fairness regarding interpersonal treatment (*interactional justice*) as a distinct construct from procedural justice. They described four rules that have come to define fair interpersonal treatment on the part of managers. These include respect (treatment with sincerity and dignity), propriety (refraining from improper or prejudicial statements), justification (providing

adequate explanations for decision making), and truthfulness (offering explanations that are honest, open, and candid) (Bies & Moag, 1986).

Many researchers argued that interactional justice was simply an extension of procedural justice because the two constructs are highly correlated (Moorman, 1991; Niehoff & Moorman, 1993; Tyler & Bies, 1990). However, other researchers have adopted a three-factor model of justice (Aquino, 1995; Bies & Shapiro, 1987; Skarlicki & Folger, 1997), and interactional justice has been found to be essential in explaining outcomes related to supervisors, such as commitment to supervisor and citizenship behaviors (Malatesta & Byrne, 1997; Masterson, Lewis, Goldman, & Taylor, 2000). Although debated by some researchers, Cohen-Charash and Spector's (2001) meta-analytic review revealed support for interactional justice as a separate construct from procedural justice.

Furthermore, Greenberg (1993) proposed that interactional justice can be separated into two components: (a) interactional factors related to distributive justice (*interpersonal justice*), and (b) interactional factors related to procedural justice (*informational justice*). In relation to distributive justice, the interpersonal dimension reflects the respect and sensitivity aspects of interactional justice because it alters the effects of the distributive outcome. A manager can increase or decrease the negative affect that an employee might experience due to an unjust reward by treating the person with respect. On the other hand, in relation to procedural justice, the informational factor reflects the information exchanged that is helpful in evaluating outcomes. This type of justice occurs when, for example, a manager takes the time to explain a procedure or the reasons a decision was made to his or her employees.

Therefore, among interactional justice rules, respect and propriety rules are grouped under *interpersonal justice,* and justification and truthfulness rules are used to define *informational justice* (Bies, 2005; Colquitt & Shaw, 2005; Colquitt, 2001; Greenberg, 1993). Colquitt et al.'s (2001) findings suggest the merit of separating interactional justice into two factors, interpersonal and informational justice.

While the debate on the four factor model of organizational justice continues, much of the recent literature has continued to endorse this model (Brent & Colquitt, 2007; Camerman, Cropanzano, & Vandenberghe, 2007; Greenberg, 2004; Judge & Colquitt, 2004). However, the model is still relatively new, and thus many researchers continue to utilize the three-factor structure that combines interpersonal and informational justice into one factor (e.g.,Greenberg, 2004). Regardless of which model is used, there has been substantial research supporting the importance of these distinct types of justice for individuals' cognitive, affective and behavioral reactions (Cohen-Charash & Spector, 2001; Cropanzano, Rupp, Mohler, & Schminke, 2001). When people perceive that their outcomes and the decision-making processes that produced them are fair, and that they have been treated fairly, they demonstrate high levels of performance, commitment, job and pay satisfaction, trust, and organizational citizenship behaviors (Cohen-Charash & Spector, 2001). When they perceive injustice with regard to these elements of organizational practices, individuals react with anger, distrust, and feelings of betrayal, which can lead to revenge and retaliatory behaviors (Bies & Tripp, 2001).

In addition, the importance of overall justice perception has also been emphasized. Overall justice reflects how employees experience fairness in a

parsimonious and accurate way (Ambrose & Schminke, 2009; Colquitt & Shaw, 2005). Ambrose and Schminke (2009) emphasized that overall justice can be helpful when one is examining the influence of fairness relative to other individual characteristics, including affect, or contextual characteristics such as support or trust. In terms of research design, Colquitt and Shaw (2005) suggested that researchers should match the level of specificity of the justice construct being investigated to the outcomes of interest. If the outcome variable is global attitudes such as overall organizational commitment, overall justice measures rather than specific types of justice should be used.

Affect, Moods and Emotions

As with organizational justice, affect has been another major research topic in organizational studies (For a review, see Barsade, Brief, & Sparato, 2003). Research on affect in organizations has examined a wide range of phenomena, from discrete emotions to moods, dispositional traits, and emotional intelligence. The term "affect" is often considered to be an umbrella term that refers to feeling states and feeling traits (Watson & Clark, 1984). While the term "state affect" represents a phenomenological condition of feeling, "trait affect" represents an individual's predisposition to experience like states across time and situations (Watson & Clark, 1984). Moods and emotions are two established categories of state affect that differ in the following respects: duration, intensity, generality and sources. Moods are mild feelings that last longer and are always present, while emotions are short-term, more intense and experienced less often than moods. In addition, moods have broader categories (e.g., positive or negative) and it is difficult to identify their source, while distinct emotions

are caused by specific events (Frijda, 1986). Trait affectivity (e.g., negative and positive affectivity), on the other hand, refers to one's disposition to experience similar states across time and situations (Watson & Clark, 1984).

As these terms have clear distinctions in their definitions, different approaches have been taken by researchers depending on which affect construct is being examined. Since discrete emotions are assumed to have specific targets or events that caused that state, links to those events or specific tendencies toward certain behavioral responses are studied. For moods, researchers have focused on the hedonic tone of feeling; that is, how pleasant or unpleasant it is. For trait affectivity, dimensional approaches are used based on an affective circumplex consisting of the two dimensions of pleasantness and activation/energy (Feldman, Barrett & Russell, 1998). Trait affect is thus divided into two constructs, positive and negative affectivity, where high positive affectivity (PA) refers to one's stable tendency to experience pleasant moods more frequently and to be enthusiastic, and high negative affectivity (NA) is one's tendency to be distressed, or upset, and to experience a negative view of one's self and the environment. Individuals with low positive affectivity tend to experience more sadness, melancholy, dullness, or lethargy, while those with low negative affectivity tend to be more serene, calm, and relaxed (Watson & Tellegen, 1985).

Emotional Reactions to Organizational Justice

Research on the relationship between justice and emotions is based mostly on appraisal theories. The emotions that are assumed to follow an appraisal are assumed to be related to the pattern of evaluated actions and their outcomes, and to whether the focus of interest is oneself or someone else. Although there is no one theory that can

encompass all of the research on this issue, affective events theory (Weiss & Cropanzano, 1996) can be considered to be the most widely used theoretical frame in this area. Affective events theory (Weiss & Cropanzano, 1996) assumes that individuals form perceptions of the environment, with the justice dimension being one example, and these evaluations will lead to a particular emotion. In an organizational context, employees appraise various organizational events and then experience certain emotions which further influence their attitude and behaviors.

Using this theoretical framework, Weiss et al.(1999) proposed that decision outcomes that are either favorable or unfavorable are the basis for the primary appraisal of concern (Frijda, 1994), and they generate the initial positive or negative direction of the emotion (e.g., happiness or sadness). Weiss et al. (1999) also proposed that the secondary appraisals that occur are based more on information about the procedures that led to the outcomes, and that the discrete emotions that are experienced depend on these secondary appraisals and the dimensions that are embedded in the procedural information. In their study of participants working in a team context, they found that reports of happiness were influenced only by the outcome, whereas reports of guilt, anger, and, to a lesser extent, pride were influenced by information about the procedure in combination with the outcome. For example, reports of guilt occurred when the outcome for the participant was positive and the procedure was biased in favor of the participant.

Many researchers have conducted studies of reactions to injustice that involved discrete emotions, using either scenarios of injustice or naturally occurring experiences of emotions and injustice, and asking participants to describe their

thoughts, feelings, and behavioral reactions. Researchers also have drawn upon emotion scripts to study emotions in organizations. For example, in studies of anger-eliciting events, people recalled events that involved unfair treatment by others (Fitness, 2000), and injustice initiated by supervisors and organizations (Gibson, 1995).

Mikula et al. (1998) showed that events regarded as unjust elicited feelings that were longer in duration and more intense, and provoked many different negative emotions (Mikula, Scherer, & Athenstaedt, 1998). Although anger and resentment were the most frequently reported emotional reactions to injustice, other emotions such as disappointment, surprise, helplessness, depression, envy, and jealousy have also been found to be reactions to unfairness depending on context (e.g., Clayton, 1992; Hegtvedt, 1990; Mikula, 1986; Mikula et al., 1998; Sprecher, 1986; Sprecher, 1992; van Dijk & Zeelenberg, 2002). Smith et al. (1994) found that both objective and subjective injustice beliefs were associated with the hostile aspect of envy, and subjective injustice beliefs especially predicted individuals' feelings of inferiority and depression (Smith, Parrott, Ozer, & Moniz, 1994). This shows that objective injustice beliefs (i.e., most people would agree that the situation was unfair) validate one's anger, thus not threatening the self, but when subjective injustice beliefs are invalidated by the environment and others, one's sense of self is hurt because unfavorable outcomes are attributed to one's own weakness or faults.

The tone of emotions felt by individuals as a reaction to unfairness is rather complex, since both positive and negative emotions can be simultaneously felt in such situations. In the context of layoffs, survivors of layoffs experienced both guilt and

gladness (Brockner, Davy, & Carter, 1985) as well as change anxiety (Paterson & Cary, 2002). In a negotiation context, the more participants perceive their outcomes to be fair, the more pleased and the less depressed they feel about them (Hegtvedt & Killian, 1999).

The role of emotions in reaction to procedural injustice was examined by several researchers in experimental settings (Cropanzano & Folger, 1989; Weiss, Suckow, & Cropanzano, 1999). An unfair outcome coupled with an unfair process produced negative emotions among participants (Cropanzano & Folger, 1989), and a favorable outcome coupled with a procedure in favor of the participants produced guilt, while an unfavorable outcome coupled with a procedure biased against the participant elicited anger. Without information about outcomes, Vermunt et el. (1996) explored how perceived procedural justice per se impacted individuals' negative emotions. Using referent cognitions theory (Folger, 1986), with the referent being previously experienced procedures, they found that the more inconsistent the current procedure was compared with the referent, the more negative the affect that participants experienced (Vermunt, Wit, van den Bos, & Lind, 1996).

In relation to procedural justice, research on voice showed that voice influences individuals' positive and negative moods and emotions under certain conditions. As voice is an important component of fair processes, individuals react to the structural existence of voice in those processes. Participants expressed a higher level of negative emotions when no voice was given (Van den Bos & van Prooijen, 2001) and experienced high levels of anger when they were denied appropriate voice as well as when they were offered inappropriate voice (Van den Bos & Spruijt, 2002). When

individuals had voice opportunities, they experienced high levels of positive emotion and low levels of negative emotions (Van den Bos & Miedema, 2000). In addition, unfair procedures of organizational downsizing led survivors to feel negative self-conscious emotions such as guilt and shame as compared to those who experienced fair layoffs (Wiesenfeld, Brockner, & Martin, 1999).

Procedural justice also interacts with leadership in its effect on the emotional reactions of subordinates (De Cremer & Hiel, 2006)**.** Relationships between procedural injustice and anger-related emotions were stronger when the leader was transformational. While an accurate procedure yields positive emotions, this relationship holds only when leadership is not biased (De Cremer, 2004). Procedural justice also interacts with collective identification such that individuals who identify with their groups and experience low procedural justice feel the highest level of disappointment (De Cremer, 2006).

In a field study, Murphy-Berman, Cross & Fondacaro (1999) examined the relationship between appraisals of procedural justice following health care treatment decisions and emotions based on the group value model of justice (Lind & Tyler, 1988; Lind & Earley, 1992; Tyler, 1989). Respondents who felt that they had been treated fairly expected that their status and their relationship with the health care decision-makers and others in their health care group would improve, perceived that the health care decision-makers would rate them favorably on a variety of personality dimensions, and indicated increased levels of pride and pleasure as well as lower levels of anger as a result of their treatment (Murphy-Berman, Cross, & Fondacaro, 1999). In this study, respondents were asked about the extent to which they agreed or

disagreed that the way in which they were treated made them feel angry, depressed, sad, proud, pleased, or ashamed. As an attempt to look at how different types of emotional ratings might be related to different types of fairness assessments, the study showed that patterns of feelings associated with perceptions of fairness are rather complex and included both positive and negative elements.

As an attempt to integrate procedural justice and distributive justice, the effect of procedural fairness on people's reactions to distributive fairness has been studied widely. The fair process effect is the robust phenomenon that outcomes following a fair process are judged fairer as opposed to those from an unfair process (see Van den Bos et al., 1997). The robustness of the fair process effect has been shown in many studies where affective reactions in relation to the fair process effect were also studied. Vermunt, Wit, Van den Bos, and Lind (1996) conducted an experiment where participants were asked to complete an estimation test for 10 items and the procedure was manipulated such that the experimenter graded 8 of the 10 items as slightly inaccurate, or 1 of the 10 items as very inaccurate. Participants showed higher ratings of negative affect following the very inaccurate procedure as opposed to the slightly inaccurate procedure, thus confirming the fair process effect.

The reversal of the fairness effect in terms of affective reaction has also been examined. Folger (1977) reported on the frustration effect: when people receive inequitable outcomes repeatedly from fair procedures with voice, they become frustrated with the voice procedures and thus react more negatively to the voice procedures than to no-voice procedures (Folger, 1977). Van den Bos et al. (1999) argued that while unfair procedures allow people to attribute unfavorable outcomes to

external factors, fair procedures do not allow room for such attribution. Therefore, people react more negatively following fair as opposed to unfair procedures when they are evaluated by the outcomes from the procedure (van den Bos, Bruins, Wilke, & Dronkert, 1999). In addition, when people compare the outcome fairness to the process fairness with a comparison goal primed, higher levels of procedural fairness lead to more negative ratings of outcome fairness as a result of contrast effect (Van den Bos, 2002). Affective reactions followed by these evaluations also reflected these contrast effect, as people showed more negative affect following slightly inaccurate procedures than following the very inaccurate procedure (van den Bos, 2002).

The deontic justice model (Folger & Skarlicki, 2005) proposes a broader context for perceptions of interactional justice and reactions to them. According to the model, individuals experience strong emotions when they see unjust behavior, since these emotional reactions have survival value in alerting people to dangerous others in the environment. This model assumes that deontic justice goes beyond personal interest, so people can react with anger to injustice done to others. Besides anger, other emotional reactions to injustice done to others were also suggested, including guilt, sympathy, fear, hopelessness and contempt (Montada & Schneider, 1989). Turillo et al. (2002) examined reactions to interactional injustice and found that third party individuals showed the highest levels of anger when the offensive behavior was portrayed to the observer as intentional rather than unintentional (Turillo, Folger, Lavelle, Umphress, & Gee, 2002). The perceived accountability and morality of the perpetrator was the main determinant for emotional reactions. Focusing on the effect of interactional justice on emotional reactions, Stecher and Rosse (2005) showed that

low distributive justice or low interactional justice elicited high levels of negative affect (anger, resentment, and bitterness), while procedural justice had no main effect on negative affect (Stecher & Rosse, 2005).

Researchers suggested a central motivational role for emotion (Mikula et al., 1998) in reactions directed at restoring equity (Hassebrauck, 1987). Emotional reactions to perceived injustice can lead to certain behavioral reactions. Research indicates that negative emotions are related to both organizational and person-targeted counterproductive work behavior (Fox et al. 2001). While perceived unfairness is considered to be an important situational factor that induces negative emotions, behavioral reactions caused by negative emotions, which may be adaptive reactions to negative stimuli at the individual level, may be considered socially dysfunctional in a social setting (Folger & Skarlicki, 1998). Therefore, negative emotions induced by perceived injustice can be funneled into counterproductive work behavior, such as theft, withdrawal, or aggression. If organizations have fair processes, however, employees' dissatisfaction over poor distributive outcomes (Greenberg, 1990) can be minimized and organizational citizenship behavior can improve as well (Organ & Ryan, 1995).

Researchers have examined different types of justice (distributive, procedural, and interactional) as predictors of emotional reactions. While negative emotions including anger, guilt, helplessness, depression, envy and jealousy have mostly been studied, some researchers found that both positive and negative emotions can be simultaneously felt as reactions to perceived injustice. Interaction between distributive and procedural justice causes different types of emotions. A fair outcome coupled with

an unfair process produced guilt, and an unfair outcome from an unfair process led to anger. Perceptions of outcomes from unfair processes caused higher negative affect in general, showing the fair process effect. However, it has also been found that people react more emotionally negatively following fair procedures with outcome that they perceived as unfair, showing the reversal of the fair process effect.

The strength of emotions felt as reactions to injustice is moderated by certain conditions (close referent, appropriateness of voice, leadership, and group identification). Emotions can target others (anger), or be more self-conscious (guilt and shame), or they can be aroused from observing others suffering from injustice. From an interactional justice point of view, the accountability and morality of the perpetrator affected the levels of anger in response to injustice.

As discussed above, quite a few studies on the relationship between justice perceptions and emotional reactions have focused on the different forms of justice predictors leading to moods and emotions, and also on the how emotional reactions to perceptions of justice can lead to certain behavioral outcomes in an organization. Based on these studies, the present research seeks to suggest an affective events model with an emphasis on the role of group-level justice.

Group-level Justice: Justice Climate

Justice is considered to be a social construct. That is, an event is identified as "just" if most individuals perceive it as such (Cropanzano & Greenberg, 1997). In an organizational context, individuals continually interact with others, especially with members within a group, and their perceptions of fairness are shaped in this social

context. However, many studies on organizational justice have taken an individualistic approach, and many times they fail to take account of social contexts.

Degoey (2000) argued that collective perceptions within work units are likely to be shared as people have a natural tendency to discuss ambiguous and emotionally charged events. For example, employees are likely to discuss organizational procedures and interactions that lead to the distribution of organizational resources and rewards. As a result of such discussions individuals' attitudes and behaviors may change.

Reflecting the importance of social interactions in forming individual perceptions of organizational justice, several researchers have suggested that justice should be considered to be a group-level construct as well as an individual-level construct. Justice climate is the most representative form of group-level justice construct. Definitions of justice climate differ slightly according to whether researchers focus on the consensus of group members' opinion or members' perceptions of the treatment for the team as a whole. The concept of justice climate has been defined as either as group-level cognition about how a work group as a whole is treated (Naumann & Bennett, 2000); group- or organizational-level justice perceptions (Liao & Rupp, 2005) ; team-level cognition regarding fair treatment for the team (Colquitt et al, 2002) ; shared perceptions of team fairness in outcomes, treatment, and supervisory interaction (Moliner et al., 2005); or the way group members treat one another (intraunit justice climate) (Li & Cropanzano, 2009). In spite of these differences, it is common across definitions that group-level justice perceptions are shared and emerge from interactions among peers (Roberson &

Colquitt, 2005). When the team is cohesive (Naumann & Bennett, 2000) or when group members work interdependently (Roberson, 2006), this interaction process is especially strong.

Justice climate can arise across any form of justice (i.e., distributive, procedural, or interactional) according to collective experiences or shared experiences of dissatisfaction with outcomes, procedures or interactions (Greenberg, 2006). In line with the three-factor model of organizational justice, procedural justice climate is thought to originate from group members' shared experiences in dealing with organizational policies and practices (Colquitt et al., 2001). How organizational policies are enacted in a group or how the group is affected by certain organizational practices can contribute to the development of procedural justice climate. In addition, interactional justice climate can originate from patterns of interaction within a team, including interpersonal treatment among coworkers or managers and information exchange between group members.

At the individual level, procedural justice for others has also been shown to be important organizational information in shaping one's emotional and behavioral reactions (De Cremer & Van Hiel, 2006). At the group level, the effects of justice climate are more powerful when all or most of the group members have been treated fairly, as compared with when only one or a few members have been treated fairly (Naumann & Bennett, 2000). Thus, group members' behavior and attitudes can be explained not only by their own treatment but also by how most other group members have been treated. Therefore, it is expected that justice climate accounts for variances in attitudes and behavior that cannot be explained by individual perceptions alone.

The present research assumes that group-level justice will also predict members' affective reactions to justice, as it provides certain normative expectations about how things should be administered or how people should behave.

The Affective Events Model of Organizational Mistreatment

As noted above, justice perceptions are constructed via social interaction and shared among individual members within a work group. In the present research, justice climate is defined as group- or organizational-level justice perceptions following Liao and Rupp (2005). To construct group-level measurement of justice climate, several approaches have been explored in the literature. Climate level, a group mean of justice applied to the group as a whole, and climate strength, a within-group variance of justice perceptions, are used to explain justice climate (Colquitt et al, 2002; Moliner et al, 2005). The referent-shift method is also used to directly capture the notion of shared perception by asking respondents about their perceptions of justice with the group in mind (Naumann & Bennett, 2000). In addition, the aggregate of individual responses about justice perceptions is used as well, following the direct consensus approach (Chan, 1998). In the present research, group-level justice refers to the level s of group perceptions of justice (high) and injustice (low).

Group-level justice and individual-level reactions

With high group-level justice in a group, meaning consensus in group perception of fairness in the workplace, members share similar perceptions and normative expectations about how policies should be administered or how people should interact with each other. High group-level justice can be developed by fair organizational procedures and policies and also reinforced by fair implementation of existing

procedures. With high group-level justice, employees perceive injustice when their norms and expectations are violated, and thus are expected to experience more negative affective reactions, as compared to those in a group with low group-level justice.

> Proposition 1. *Group-level justice will moderate the relationship between organizational mistreatment and individual affective reactions. While an experience of unfair events will induce negative feelings, individuals under high group-level justice will feel more negative emotions when faced with organizational mistreatment than those under low group-level justice (Study 2 examines this proposition).*

With low group-level justice, meaning consensus in group perception of unfairness in the workplace, employees tend to develop low expectations of fair procedures and treatments, and thus their frequent experiences of injustice will not trigger such strong negative affective reactions. Instead, those experiences will reinforce their negative attitudes (e.g. cynicism) towards the group and organization. In a group with high group-level justice, unfair events will be rare, and thus those experiences will not contribute to employees' negative work attitudes as much as in a group with low group-level justice.

Organizational cynicism is a negative attitude toward one's employing organization, comprising three dimensions (Dean, Brandes, & Dharwadkar, 1998): (1) a belief that the organization lacks integrity; (2) negative affect towards the organization; and (3) a tendency to disparaging and critical behaviors toward the organization that are consistent with these beliefs and affect. Organizational cynicism

is also defined as both general and specific attitudes characterized by frustration, hopelessness, and disillusionment, as well as contempt toward and distrust of a person, group, ideology, social convention, or institution (Andersson, 1996). As an attitude of a person, organizational cynicism is likely to be formed when individuals experience unfairness under low group-level justice.

With this type of attitude formed under low group-level justice, passive behavioral reactions to mistreatment are expected to occur. With the perception that there is nothing they can do to change unfair procedures or practices as fairness has not been guaranteed in their group, employees are not likely to use formal conflict resolution procedures in their organization. Instead, they will remain silent, which also reinforces employees' feeling of futility (Morrison & Milliken, 2000). This can be considered a variant of the frustration effect (Folger, 1977). As long-term outcomes of experiences of unfairness under weak group justice norms, employee apathy and withdrawal behaviors are expected.

Proposition 2. *Group-level justice will moderate the relationship between organizational mistreatment and negative attitudes (organizational cynicism) towards the workplace. While experience of unfair events will be associated with negative attitudes towards the workplace, this relationship will be stronger under low group-level justice than high group-level justice (Study 3 examines this proposition).*

If there are variances in the perception of justice in a group, it is difficult to say whether there is any clear group-level justice. Thus, individuals under low justice climate strength are less likely to have a convincing reference point even after

engaging in a sensemaking process with other group members. Therefore, it is assumed that individuals' reactions to unfairness will vary according to their individual characteristics (e.g., positive and negative affectivity) rather than be affected by group-level justice characteristics.

There are competing hypotheses regarding the role of affect, as shown in previous research. It is argued that people high in negative affectivity expect negative fallout, so they will not be surprised when they receive mistreatment and do not react strongly to it. However, people low in negative affectivity feel that their expectations are violated by mistreatment and hence react more negatively (Begley & Lee, 2005). On the other hand, it has also been shown that both state and trait positive affect are associated with higher levels of perception of distributive, procedural, and interactional justice while negative state and trait affect, in turn, are associated with lower levels of justice perceptions (for a review, see Barsky & Kaplan, 2007). In other words, it may be that people with high negative affectivity experience strong emotional reactions to injustice from their harsher evaluation of the situation, or they have somewhat weaker emotional reactions to injustice due to their low expectations.

Whichever the main effect of trait affectivity is, the relationship between individual trait affectivity and people's reactions to justice are expected to be moderated by the strength of group-level justice. If there is high strength, meaning high consensus in group perceptions of justice, the role of individual trait affectivity is weak, and thus proposition 1 holds. However, in the case of low strength, the effect of group-level justice will disappear, and the relationship between individual trait affectivity and people's reactions to injustice will be stronger.

Proposition 3. *The strength of group-level justice (variance in group perceptions of justice) will moderate the relationship between individual trait affectivity (positive and negative affectivity) and individual affective reactions. Trait affectivity will be strongly associated with individual emotional responses when individuals are faced with organizational mistreatment under low group-level justice strength (high variance in perception) more than under group-level justice with a high level of strength (low variance in perception).*

Emotions as mediators between justice perception and behaviors

In the cognitive processes leading to behavioral or attitudinal responses, emotions also play a role as mediators. Several researchers examined the mediating role of emotions in the relationship between perception of justice and behavioral outcomes. In affective event theory, affective reactions mediate event appraisal and behavioral reactions. Weiss & Cropanzano (1996) proposed that affect-driven behaviors follow directly from affective experiences and are influenced by processes such as coping or mood management, while judgment-driven behaviors are mediated by satisfaction with and consequences of decision-making processes. Justice events can be considered in both paths, and thus feelings arising from these events drive behavioral and attitudinal responses.

In examining the relationship between justice and emotions, most of the studies have focused on the mediating role of negative affect leading to undesirable behaviors. In several studies, negative emotions (e.g. anger, envy, or depression) mediated the relationship between justice perceptions and various attitudinal and behavioral reactions including counterproductive work behaviors, compliance with organizational

rules, and intention to leave or to take action against the perpetrator or the organization (Van Yperen et al, 2000; Rupp & Spencer, 2006; Gordijn et al., 2006). In a group context, disappointment led participants who are highly identified with their group to undertake revengeful action in reaction to unfair treatment (De Cremer, 2006). With regard to inter-group treatment, the emotion of anger was found to mediate the relationship between the appraisal of the treatment and the intention to take action against the perpetrator. (Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006). In another study, group-based appraisal of injustice created group anger, which promoted a tendency toward collective action against the organization (van Zomeren, Spears, Fischer, & Leach, 2004).

As noted previously, there will be stronger negative affective reactions under high group-level justice after individuals face mistreatment. Anger, the most representative outward-focused emotion, is mostly likely to be felt in such situations. Outward-focused negative emotions (i.e., anger and hostility) are associated with the desire for revenge, directing action against the perpetrator, punishing behavior, and retaliatory impulses (e.g., Allred, 1999; Averill, 1982; Weiner, 1985). Barclay et al. (2005) showed that outward-focused negative emotions mediated the relationship between fairness perceptions and retaliation. The experience of anger may be associated with attempts to clarify and resolve a source of disagreement or conflict (Averill, 1982). Anger can signal a variety of messages, including dissatisfaction with an action, dissatisfaction with treatment, or a violation of justice (Tavris, 1982). Therefore, it is expected that anger motivates individuals to "right wrongs" and deter future injustices (Bies & Tripp, 2002). Together with anger various negative emotional

reactions are expected to mediate the experience of unfairness and behaviors at the individual level, and this relationship will be moderated by group-level justice, such that under high levels of justice climate, the mediating role of negative emotions will be stronger.

Proposition 4. *Negative affective reactions will mediate the relationship between unfair treatment and individual behavioral reactions (Study 2 examines this proposition).*

Proposition 5. *Group-level justice will moderate the mediation of emotions. The relationships proposed above will be stronger under high group-level justice (Study 2 examines this proposition).*

Moderating role of justice climate in the use of conflict resolution procedures

Faced with the experience of unfairness, individuals can pursue to restore justice through formal organizational procedure such as grievance procedures. Filing a grievance about the mistreatment has been considered as representative voice mechanism (e.g., Boroff & Lewin, 1997; Lewin & Peterson, 1999). Klaas (1989) model of determinants of grievance activity starts at the point where the "employee perceives a grievance activity," and it distinguishes between perceived grievance opportunities motivated by economic opportunities and those motivated by perceptions of mistreatment. The current affective events model contributes to the latter case, as grievance filings based on mistreatment perceptions are likely to relate to both affective and behavioral responses on the part of the individual employee.

In addition, it is expected that the use of formal grievance procedure will be moderated by the levels of group-level justice, such that individuals may seek to

utilize formal grievance procedures under high levels of justice climate. Previous fair implementations of the grievance procedure can establish the high levels of justice climate in an organization, thus individuals can trust the system and are motivated to use the system when faced mistreatment. Although it has been shown that there are risks involved with potential reprisal after resolving conflicts via internal grievance procedures (Lewin & Peterson, 1988), it is expected that there exist lesser degree of reprisal related to the use of grievance procedures under high levels of justice climate.

Proposition 6. Individuals will seek formal conflict resolution behaviors when they face with unfair treatment (Study 1 examines this proposition).

Proposition 7. *Group-level justice will moderate the relationship between unfair treatment and the use of formal grievance procedures (Study 1examines this proposition).*

Olson-Buchannan and Boswell (2008) posit that Hirschman's (1970) concept of voice is not limited to grievance filing but also includes remedial voice which refers to any dispute resolution actions in which the individual directly communicates his or her perspective of feeling mistreated in an attempt to resolve the mistreatment. The present study includes these behavioral options such as engaging in sense-making with colleagues as potential behavioral responses and proposes that these constructive voicing will be more likely under high group justice.

Proposition 8. Individuals will seek informal conflict resolution behaviors when they face with unfair treatment (Study 1 examines this proposition).

Proposition 9. Group-level justice will moderate the relationship between unfair treatment and the use of informal conflict resolution behaviors (Study 1examines this proposition).

Potential moderators of affective reactions

With regard to the potential moderators of affective reactions other than group justice, group or organizational norms for the expression of emotion per se can be considered. Barsade and Gibson (2007) pointed out that teams' affective culture may influence the degree of emotional expression in organizations. Affective culture includes display rules about expressed emotions at the collective level, prescribing the appropriateness or inappropriateness of particular emotional expressions in organizations (Barsade, Brief & Spataro, 2003; Barsarde & O'Neill, 2004), and such a culture this may influence the degree of affective reactions of individuals in organizations through different levels of the contagion process. As an attempt to measure this group-level affective phenomenon, the affective tone of groups will be measured. By evaluating the accepted and observed emotional expression of other group members, group-level affect tone can be derived.

On the other hand, the mediating role of positive emotions has not yet been studied extensively in the justice and emotion literature. Based on the group-value model of justice (Lind & Tyler, 1988), it was demonstrated that pride and respect mediated the effects of relational judgments about group authority and compliance with group rules, group commitment, and citizenship behaviors (van Zomeren et al., 2004). High group-level justice, either procedural or interactional justice climate, is likely to bring similar types of positive emotions as state affect in group members, and

these emotions will mediate the relationship between individual justice evaluation and behavioral reactions. Understanding positive affect as a mediator between justice perception and behavioral reactions will help complete the understanding of the causal paths between justice and emotions.

Proposition 10. *Group-level justice will be associated with group-level affective tone. High group-level justice will be associated with positive group-level affective tone.*

Proposition 11. *Group-level affective tone will mediate the relationship between individual justice perceptions and behaviors. The more positive tone exists in group, the more organizational citizenship behaviors individuals will engage in.*

Conclusion

Incorporating the effect of group-level justice on individuals' affective responses into the affective events model will yield insights regarding how, why, and under what conditions people have different affective reactions and derive fairness judgments accordingly, and how organizations may create and foster these perceptions by assuring organizational justice.

Examining the relationship of group-level justice to various affective and behavioral reactions can contribute to the newly developing area of justice climate by elaborating the nature of the group-level construct of justice. Focusing on the affective mechanisms, this research also can help explain the complex nature of the relationship between justice and emotions. The benefits and costs of maintaining a high level of group-level justice will be examined, as well as the downside of having a low level of

group-level justice, which reinforces negative attitudes towards the workplace. In relation to the role of affective reactions and the use of conflict resolution procedures, understanding the role of group-level justice can also provide insights for appropriate design and implementation of formal or informal conflict resolution procedures in organizations. In addition, there has been little empirical research or theoretical work examining the relationship between group-level justice perceptions and group level (contagion) affective and behavioral responses to the experience of injustice. By exploring this relationship as well as trying to validate measurements of group-level affective reactions, this research can contribute meaningfully to not only organizational justice research but also to research on emotions in organizations.

However, there are many more aspects to be discussed regarding the model and construct proposed here. Regarding facets of justice perception (i.e. procedural, interactional, and distributive justice), group-level justice may emphasize certain types of justice over others. It is possible that some groups have group-level justice focusing more on distributive justice (i.e. equity norms), while other groups have group-level justice emphasizing fair procedures (i.e. non-discriminatory nature of organizational policy), and other groups may have more salient norms for interactional justice. Individual employees may have stronger affective and behavioral reactions to violations of the type of justice that has been emphasized by the particular focus of group justice that exists in those employees' workplace. For example, if work group members have strong group justice in terms of interactional justice, they may be more concerned about the misconduct of persons than about unfair procedures or outcomes. Previous findings on the interactions between these types of justice can also be studied

in relation to the role of group-level justice, thus expanding the research literature on group-level justice constructs.

The influence of negative affective reactions in the workplace can be very complex. When negative emotions are strongly felt by employees (Miner, Glomb, & Hulin, 2005), the dysfunctional effect of individual negative affective reactions can be substantial. Negative emotions may harm organizational cultures (Aquino, Douglas, & Martinko, 2004), or lead to aggression or violence (Fox & Spector, 1999). In the current research, individual negative emotions elicited by a trigger event are assumed to signal organizational unfairness and injustice and the degree of group-level justice norms. Managers can understand employees' negative emotions as beneficial, since they draw attention to problematic features of the organization, and thus provide a direction for correction, especially regarding organizational conflict resolution procedures.

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CHAPTER 2

THE MODERATING ROLE OF JUSTICE CLIMATE IN THE RELATIONSHIP BETWEEN MISTREATMENT AND CONFLICT RESOLUTION BEHAVIORS

Experience of unfairness in the workplace is an emotionally laden process (Bies & Tripp, 1996). As pointed out in affective events theory (Weiss & Cropanzano, 1996), work events are proximal causes of affective reactions, and thus the experience of unfairness in the workplace is an important source of negative affective reactions followed by behavioral reactions. Within the affective events model, the current study investigates the role of group-level justice in forming such behavioral reactions when people are faced with organizational mistreatment within the affective event model. The cross-level effects of contextual factors in the model have not yet been fully explored, although those responses are formed within the larger context that affects individual perceptions.

As pointed out in the multi-level model of conflict (Korsgaard, Jeong, Mahony & Pitariu, 2008), cross-level effects link higher-level inputs to lower-level behaviors. Group-level justice climate, therefore, is expected to affect the interactions between members of a group as well as their own behaviors. While employees' perceptions that they have been mistreated by the organization will involve negative affective reactions, individual employees try to make sense of the situations through sensemaking with third party others and seek to respond to the interpreted mistreatment in various ways (Olson-Buchannan & Boswell, 2008). In this process, group-level justice will

influence the interpretations of individuals in a team and the way they interact with each other, thereby guiding them to certain behavioral options.

Group-level justice has been shown to be related to various work-related outcomes. Procedural justice climate (PJC), defined as a distinct team-level cognition regarding how fairly the team as a whole is treated procedurally (Naumann & Bennett, 2000), has been shown to relate to team performance and absenteeism (Colquitt et al., 2002). Team justice (Roberson & Colquitt, 2005) accounts for the social processes that lead to the emergence of justice at the team level of analysis and is suggested to be linked with team effectiveness. These types of group-level justice will play important roles in the sensemaking process through which individual employees conclude that the trigger event constitutes as mistreatment and select their ways to respond. However, there has been scant empirical research or theoretical attention given to examining the relationship between group-level justice and individual employees' responses after their experiences of unfairness.

Organizational mistreatment is an affective event which works as a proximal cause of affective reactions, and thus primary and secondary appraisal processes are followed by the trigger events. *Primary appraisals* are generally directed toward determining the relevance of the event to one's well-being, goals, and/or values, whereas *secondary appraisals* involve interpreting and assigning meaning to an event. Although emotion scholars have identified several components of secondary appraisals, these appraisals typically include identifying who is responsible for the event (e.g., self vs. other; e.g., Lazarus, 1991; Smith & Ellsworth, 1985). Sensemaking possesses these characteristics of appraisal (i.e. interpretation of events and

attributions of blame), and thus can be considered one part of the affective events theory model of mistreatment.

Building on the affective events theory framework, the current research seeks to integrate the mistreatment model with justice literature, with an emphasis on the role of group-level justice in shaping behavioral reactions to organizational mistreatment. In the affective event model of organizational mistreatment, affective reactions to specific events are moderated by group-level justice, and behaviors can be direct results of affective reactions or results of a more deliberative process that makes use of attitudes and judgment processes. Weiss & Cropanzano (1996) proposed that affect-driven behaviors follow directly from affective experiences and are influenced by processes like coping or mood management, while judgment-driven behaviors are mediated by satisfaction and the consequences of decision processes. It is proposed that under high group-level justice, behaviors driven by strong negative affect will be more likely, and that behaviors driven by attitude (e.g. helplessness) will be more likely under low group-level justice. Behavioral reactions, both affect-driven behaviors and attitude-driven behaviors (Weiss & Cropanzano, 1996), encompass employees' behavioral options such as using remedial voice (Olson-Buchannan & Boswell, 2008), or using formal conflict resolution procedures in organizations. Incorporating group-level justice and individuals' behavioral responses into the affective events model of organizational mistreatment will yield insights regarding how and why people show different paths of action when they face organizational mistreatment.

Group-level Justice

Recognizing the importance of the social property of organizational justice, perceptions of justice have been studied at the group level, especially regarding procedural aspects of organizational practices. Several group-level justice constructs have been proposed such as procedural justice climate (Naumann & Bennett, 2000) and team justice (Roberson & Colquitt, 2005). Procedural justice climate refers to a distinct team-level cognition regarding how fairly the team as a whole is treated procedurally (Naumann & Bennett, 2000) and team justice (Roberson & Colquitt, 2005) means the shared perceptions of team members about how the team as a whole is treated. Although similar in that both refer to group-level perceptions, team justice has focused more on the processes through which such perceptions develop with special emphasis on the role of interaction between team members, while justice climate has been conceptualized to be similar to individual justice perceptions in their content and operations but with a focus on the unit as a referent. Although these group-level constructs share important elements of justice such as consistency, bias suppression, accuracy, correctability, representativeness, ethicality, respect, propriety, justification, and truthfulness (Bies & Moag, 1986), the current research tries to utilize a group-level justice construct that involves additional normative elements regulating behaviors of group members.

Group norms are the informal rules that groups adopt to regulate and regularize group members' behavior (Feldman, 1984). Although these norms are infrequently written down or openly discussed, they often have a powerful and consistent influence on group members' behavior (Hackman, 1976). As taken-for-granted beliefs about

how people should think and behave (Homans, 1974), norms are collectively agreed-upon standards for behaviors, attitudes, and beliefs that give employees a shared meaning or understanding of the workplace and their roles in it (Schein, 1990). Employees understand the obligations implicit in the norms and the expectations placed on their behavior.

Building on the characteristics of group norms, group-level justice with normative elements can be defined as the informal rules regarding justice-related expectations and behavior, which regulate group members' affective and behavioral reactions to justice-related events in organizations. The group may refer to either the department or the organization in which an individual employee seeks to make sense of uncertain situations. Group-level justice includes obvious factors such as fair HR policies or scripts for dealing with unfair treatment, as well as more complex and not easily detected expectations about equity and intolerance toward unfair practices. Group-level justice may be high or low in level, according to the features of the group, and different levels of group justice may have differential impacts on employees' behavioral responses to mistreatment.

Group norms can develop through explicit statements by supervisors or co-workers, critical events in the group's history, primacy, or carry-over behaviors from past situations (Feldman, 1984). At the departmental level, fair practices by a supervisor or fair exchanges between co-workers and fair resolution of conflict may set high levels of group justice. At the organizational level, the presence of explicit fairness principles, special emphasis on the value of justice, and customary practices regarding justice-related events can contribute to high levels of group justice. High

levels of group justice are well known to group members and reinforced by fair implementation of existing procedures. Institutional factors such as the existence of a union and its appropriate representation of employees' rights in organizations can also help to build group-level justice.

Group-level justice may influence group members in the same way as injunctive norms (Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007) that specify what ought to be done in groups. Compared to descriptive norms that describe what is typical or normal in a given context, injunctive norms guide what is acceptable and what is not. When injunctive norms are accepted, employees follow norms in the absence of external sanctions and these norms serve as imperfect obligations, obligations enforced by conscience and social pressure (Etzioni, 2000). Breaking either type of norm leads to sanctions: shame in the case of descriptive norms and guilt in the case of injunctive norms.

Justice is often a clear demonstration of showing the strength of injunctive norms anchored in the value of fairness. As with the outcome, the rule of proportionality is universal (Homans, 1974), and people have different expectations of what should be considered as rewards through their own experience in social exchanges and by observing what happens to others. High levels of group justice will set clear and consistent expectations of this type among group members. As a set of informal rules of expectations and behavior, group-level justice guides members' perceptions beyond representing pre-existing group-level perception. As more of a guiding principle, employees are expected to use group-level justice to decide the appropriate way to behave in a given situation.

As group-level justice regulates behaviors regarding the implementation of organizational policies and practices, fairer and consistent administration is expected in a situation where group-level justice is high. Employees expect fair implementation of policies and practices from their supervisors and among themselves when they are exposed to salient justice norms under high group level justice. Thus, people under high group-level justice will share similar perceptions. Therefore, it is proposed here that group-level justice is expected to influence group members' affective and behavioral reactions.

The Group Value Model and Group-level Justice

At the most macro level, the moderating role of group justice can be explained by the group value model (Lind & Tyler, 1988) of procedural justice. The group value model puts an emphasis on the effects of values associated with group membership. Assuming that group membership is a powerful aspect of social life, affective relations within and between groups and cognitive constructions with respect to those relations are potent determinants of attitudes and behavior. Lind and Tyler (1988) argued that group identity and group procedures are two elements that govern group members' thoughts and behavior with respect to groups. Group identity is the factor that distinguishes the group from other social entities, and it shows the external features of the group. As internal features of the group, group procedures in their model refer to the authority relations and the formal and informal social processes that regulate group activity. Compliance with procedures in the organization is determined by the strength of the group values mandating such behavior.

In the group value model, the procedures are seen as norms of treatment and decision-making that regulate a group's social structure and process. When procedures are in harmony with the values of the group and the individual, a sense of procedural justice is secured. An organization or department with high group-level justice would establish justice as an important value of the group, and thus this value of the group would be instilled in group members through the socialization process. Given that group-level justice refers to the shared rules and importance of justice in the group, organizations with high group-level justice would result in stringent fairness evaluations of the procedures themselves. Thus, employees in a group with high group-level justice will have stronger feelings against perceived injustice, resulting in more negative affective and behavioral reactions than employees in a group with low group-level justice.

Sensemaking and the Role of Group-level Justice

The specific role of group-level justice can be examined within the framework of the organizational mistreatment model. The Experience of unfairness can come from various work-related events in organizations. When it comes to the issue of justice, the socially charged nature of justice may compel members to discuss and interpret their treatment by the organization over time (Degoey, 2000) and group-level justice influences individual members' affective and behavioral reactions through this stage of discussion and interpretation- sensemaking. Olson-Buchannan and Boswell (2008) argued that when individuals experience situations that could easily be interpreted in more than one way or that have seemingly important consequences (e.g., emotional, high stakes), they will likely engage in some form of individual or third-party

sensemaking (Weick,1995) before concluding that mistreatment has or has not occurred. As situational factors that moderate whether sensemaking occurs and the nature of the sensemaking (Olson-Buchannan & Boswell, 2008), group justice affects the nature and influence of the sensemaking process.

When there is high group-level justice, trustworthy behaviors can be explained by situational forces such as fair organizational policies, but negative events are viewed as more intentional and malicious (Bies et al, 1997). Therefore, the target of blame is relatively clear since the experience of unfairness is an unusual violation of norms. When individuals can externalize blame, they feel outward-focused emotions such as anger and this attribution of blame may lead to individuals' behavior to challenge such violations. When people get angry after figuring out that there are clear targets for blame, they can act specifically against the person who is responsible, or the system that is problematic.

On the other hand, under low levels of group justice where consistent fair practices are not guaranteed by the group or organization, it is more difficult to make attributions of blame when facing injustice. Korsgarrd et al. (2002) found that trustworthy behavior was negatively related to attributions of personal responsibility for negative encounters, and this relationship was stronger when human resource policies were perceived as unfair. The presence of unfair human resource policies is not likely to establish high levels of group justice. In this situation, if managers show trustworthy behaviors, they are less likely to be held responsible for negative events. However, this makes it more difficult to make attributions of blame for the negative

events. Therefore, it is assumed that the relationship between mistreatment and behavioral reactions is not as strong as it is under salient group-level justice.

The effect of low levels of group justice can be explored with the examination of the frustration effect (Folger, 1977) as well. People rate inequitable outcomes from a fairer procedure as less fair than the same outcome from an ostensibly less fair procedure. This stands in contrast to the usual effect of procedural justice – higher distributive fairness judgments under fair procedures. Lind and Tyler (1988) pointed out that although this effect is rare, it is a real phenomenon. They argued that the frustration effect will occur when the characteristics that give the procedure a procedural fairness advantage are relatively weak. When a weak procedural advantage is opposed by negative outcomes whose impact is strengthened, either by repeated disappointment in the face of rising expectations (Folger, 1977), or by social support for the perception that the outcome is unfair (Folger, 1979), this rare response is instigated. If people reevaluate their outcomes and weak procedures with an eye toward discovering possible corruption in the decision–making process (Lind & Tyler, 1988), the frustration effect will occur. This set of factors can explain the development of salient *weak* group-level justice regarding the use of conflict resolution procedures in non-unionized organizational settings.

In most non-unionized organizational settings, conflict resolution procedures are adopted by management, and employees accept the formal procedures at face value. The adoption of formal procedures itself can imply the existence of procedural justice since organizational members expect that the procedures will serve their interests as compared to the case of no such formal procedures. However, if systemic features of

internal conflict resolution procedures do not allow representation of employees' opinions or values, it is evident that there are weak voice mechanisms within the procedures. In addition, if there is repeated disappointment with the outcomes from the adopted conflict resolution procedures (factual support) or social support for the supposition that the procedure is corrupt, the frustration effect will occur (Lind & Tyler, 1988). Employees will evaluate the outcomes as less fair, even when the procedure seems fair as compared to those organizations with no such procedures at all.

Judgment-driven Behaviors under Low Group-level Justice

Under low group-level justice, groups do not emphasize justice as a central value, and employees experience unfair practices far more often than those under high group-level justice do. With repeated unfair practices and a lesser degree of agreement on what it means to be fair in an organization, negative attitudes among employees are likely to be formed. Organizational cynicism is a negative attitude toward one's employing organization, comprising three dimensions: (1) a belief that the organization lacks integrity; (2) negative affect towards the organization; and (3) tendencies to disparaging and critical behaviors toward the organization that are consistent with these beliefs and affect (Dean, Brandes, & Dharwadkar, 1998: 345). It is also defined as both general and specific attitudes characterized by frustration, hopelessness, and disillusionment, as well as contempt toward and distrust of a person, group, ideology, social convention, or institution (Andersson, 1996). As an attitude of a person, organizational cynicism is likely to be formed when individuals experience unfairness under low group-level justice.

When this type of attitude is formed under low levels of group justice, passive behavioral reactions to mistreatment are expected to occur. As discussed above, with the perception that there is nothing they can do to change unfair procedures or practices, employees are not likely to use formal conflict resolution procedures in an organization. Instead, they will remain silent, which also reinforces employees' feeling of futility (Morrison & Milliken, 2000), and a state of learned helplessness (Seligman, 1975) may develop, leading to employee apathy and withdrawal. Therefore, lesser usage of conflict resolution procedures in an organization does not mean that the organization is healthy. On the contrary, it is likely to signal that there is very low group-level justice, which discourages employees from using formal conflict resolution mechanisms when facing mistreatment.

Affect-driven Behaviors under High Group-level Justice

The previous discussion indicated that there will be stronger negative reactions after individuals face mistreatment under high group-level justice. Anger, the most representative outward-focused emotion, is mostly likely to be felt in such situations. The experience of anger can be associated with attempts to clarify and resolve a source of disagreement or conflict (Averill, 1982). Anger can signal a variety of messages, including dissatisfaction with an action, dissatisfaction with treatment, or a violation of justice (Tavris, 1982). Therefore, it is expected that anger motivates individuals to "right wrongs" and deter future injustices (Bies & Tripp, 2002).

In choosing several behavioral options driven by anger, group-level justice can influence the types of behavioral responses. Averill (1980) discussed the possible influence of conflict between personal norms and social norms in shaping individual

emotional responses and experiences. Since behaviors that are consistent with personal norms but not social norms are liable to be deemed inappropriate, and well-internalized norms held by individuals reflect social norms, individuals under high levels of group justice will choose constructive and fair responses to mistreatment rather than engaging in counterproductive work behaviors. In this way, high group-level justice will influence behaviors to restore justice felt by individuals and turn their attention to the use of formal conflict resolution procedures.

Appeal behavior

In addition to the behaviors previously shown to be related to the perception of unfairness (e.g., intention to leave or to take revengeful action), the intention to use conflict resolution procedures is also examined in relation to the impact of justice climate. Faced with the experience of unfair events, individuals can pursue efforts to restore justice through formal organizational procedures such as grievance procedures. Filing a grievance over an instance of mistreatment has been regarded as a representative voice mechanism (e.g., Boroff & Lewin, 1997; Lewin, 1987; Lewin & Peterson, 1999). Klaas's (1989) model of determinant of grievance activity starts at the point where the "employee perceives a grievance activity," and it distinguishes between perceived grievance opportunities motivated by economic factors and those motivated by perceptions of mistreatment. The current study applies to the latter case, as grievance filings based on mistreatment perceptions are likely to relate to behavioral responses on the part of the individual employee.

Although it has been shown that there is the risk of potential reprisal after attempting to resolve conflicts via internal grievance procedures (Lewin & Peterson,

1988), it is expected that such reprisals will occur less frequently under high group-level justice. Fear of managerial reprisal is assumed to be low and the appropriateness of the issues should be more clearly known under high group-level justice than under low group-level justice. Use of conflict resolution procedures (grievance, appeal, or peer review) implies that employees using the procedures believe that the situations in question are correctible and that their voices can be heard. With low group-level justice, there would be no such guarantee of procedural and interactional justice in the conflict resolution procedures. Therefore, more use of formal grievance procedures is expected under high-level justice climate.

Hypothesis 1. Group-level justice will moderate the relationship between fairness evaluation and the intention to use formal conflict resolution procedures (Appeal).

1a. Procedural justice climate will moderate fairness evaluation and appeal intention.

1b.Distributive justice climate will moderate fairness evaluation and appeal intention.

1c. Interactional justice climate will moderate fairness evaluation and appeal intention.

Report behavior

However, the use of formal conflict resolution procedures should be understood as only part of the story of resolving organizational conflict. Olson-Buchannan and Boswell (2008) posit that Hirschman's (1970) concept of voice is not limited to grievance filings but also includes remedial voice, which refers to any dispute resolution actions in which the individual directly communicates his or her perspective

of feeling mistreated in an attempt to resolve the situation. Besides formal grievance procedures, various remedial voices will be used to make sense of the situation and correct injustice under high group-level justice. Reporting to higher-level managers about mistreatment can be regarded as one type of remedial voice. This assumes that individuals believe that a higher-level manager would correct the situation, and do so in a fair manner, reflecting the presence of high levels of group justice. Therefore, it is assumed that group-level justice will moderate the relationship between fairness evaluation and the intention to report to higher-level managers such that people would be more willing to report under high levels of group justice.

Hypothesis 2. Group-level justice will moderate the relationship between fairness evaluation and intention to report to higher-level managers (Report).

2a. Procedural justice climate will moderate fairness evaluation and report intention.

2b.Distributive justice climate will moderate fairness evaluation and report intention.

2c. Interactional justice climate will moderate fairness evaluation and report intention.

Sensemaking behavior

Sensemaking is an important behavior when dealing with mistreatment. Sensemaking refers to "processes that people use to impose or derive structure of meaning when they experience complex, ambiguous, or stressful situations" (Volkema, Farquhar, and Bergmann, 1996). Group-level justice can be communicated (e.g. "that's not something that should be happening here" or "that happens all the time")

and reinforced by the sensemaking process by interacting with other group members. Volkeme et al. (1996) argue that third party others' familiarity with issues and the target of mistreatment makes it more likely that they will be consulted during the sensemaking process. As work colleagues are more familiar with the individual as well as trigger issues than other third parties, they are mostly the ones who will be consulted by the individual regarding perceived mistreatment trigger events.

With high levels of group justice, the informal rules regarding justice-related expectations and behaviors strongly regulate group members' justice-related behaviors. Therefore, organizational practices by group members will be more consistent and individuals will have high expectations of fairness in the organization. The experience of unfairness under high group-level justice represents a serious violation of norms held by individuals and other group members, and thus is interpreted as mistreatment. Also, as this is a clear violation of norms, the duration of sensemaking under high group-level justice can be relatively shorter than under low group-level justice. Through this sensemaking, the weighted meaning of the trigger event is given by others, and thus individuals will have a strong willingness to act to restore justice.

On the other hand, with low levels of group justice, organizations or departments will likely have less consistent practices and there may be less power to regulate groups' behaviors. Individuals may have their own perception of justice, but their experience of unfairness is not strongly interpreted as mistreatment in sensemaking with other members, and thus it will elicit negative reactions to a lesser degree. Therefore, with low levels of group justice, the experience of unfairness may not elicit strong reactions among individuals as much as it does with high levels of group justice.

Hypothesis 3. Group-level justice will moderate the relationship between fairness evaluation and the intention to engage in sensemaking with colleagues (Colleague).

3a. Procedural justice climate will moderate fairness evaluation and sensemaking.

3b.Distributive justice climate will moderate fairness evaluation and sensemaking.

3c. Interactional justice climate will moderate fairness evaluation and sensemaking.

Collective action

Engaging in a collective action can be another type of remedial voice to restore justice. Any way that individuals can raise their voice to others about mistreatment, is broadly termed collective action in the current study. It may include participation in problem-solving teams for the specific mistreatment (e.g., committee) or making a collective decision to establish a certain policy against a specific type of mistreatment. As compared to the type of sensemaking that was previously discussed, collective action requires more directed collective efforts towards the resolution of the issue at hand. Individuals may participate in a pre-existing committee or initiate new collective action. Mobilizing others to act in order to restore justice in the face of mistreatment requires a certain degree of agreement on the appropriateness of the issue among team members. Therefore, under high levels of group justice, it should be easier to receive others' consent to engage in collective action. If there exist pre-existing avenues for collective action, this also signals that there is already collective agreement on the problematic features of the organization. Therefore, it is assumed that group-level

justice will moderate the relationship between fairness evaluation and the intention to engage in collective action.

Hypothesis 4. Group-level justice will moderate the relationship between the fairness evaluation and intention to engage in collective action (Collective).

4a. Procedural justice climate will moderate fairness evaluation and collective action.

4b.Distributive justice climate will moderate fairness evaluation and collective action.

4c. Interactional justice climate will moderate fairness evaluation and collective action.

Methods

Data and sample

Survey data were collected from work teams in Korean organizations across two rounds of surveys. A work team was defined as individuals working together with complementary skills and knowledge and reporting directly to the same supervisor (team leader). In addition, a work team is the smallest functional unit in the organization, working toward a common goal on a recurring basis. The author queried organizations regarding their groups' interest in participating before the survey was conducted. Because of this effort, most groups to which surveys were distributed returned completed surveys, yielding a response rate of 91% (80 out of 90 teams) for the first-round survey (Time 1) and 98% (73 out of 80) for the second-round survey (Time 2). The final sample consisted of 333 employees nested in 73 teams from 14 organizations.

A diverse range of organizations in Korea was sampled. Industries represented by the 14 organizations included retailing, manufacturing, finance, R&D, information technology, energy, and services. This diversity of industries was intentional to avoid contextual influences specific to industry type. In the final sample of 73 work teams, team size ranged from 2 to 14, with an average size of 5 (SD = 1.79). Of the teams sampled, 27 teams had 5 members and 11 teams had 6 to 9 members. Thirty-five teams had 2 to 4 members, with one team consisting of 14 members. Sampling a limited number of employees within groups (e.g., 3 to 7) has been advanced as an acceptable measure in previous multilevel justice-related studies (e.g., Ambrose & Schminke, 2003; Schminke, Cropanzano, & Rupp, 2002). Among participants, 69% were men, and 97.2% had two-year college or higher degrees. Age of participants ranged from 20 to 50, with a mean age of 31 years. Regarding organizational tenure, 12% had been with the organization less than 1 year, 45% between 1 and 5 years, and 43% for more than 5 years. On team tenure, 25% of participants had been on their current team less than 1 year, 38% between 1 and 3 years, 20% between 4 and 6 years, and 17% more than 6 years. All of the respondents were full-time employees, and data were collected from team members in non-managerial positions.

Procedures

Interviews were conducted with a sample of participants to gather qualitative information about group atmosphere, organizational practices, and usual conflict resolution procedures. Based on these interviews as well as media reports on workplace conflicts, six fairness violation scenarios were constructed focusing on each facet of organizational justice. After a pilot study, in which the scenarios were

evaluated, three scenarios – one each representing distributive justice violation, procedural justice violation, and interactional justice violation – were selected and included in the second-round survey.

With regard to participating organizations, one representative (most of them were HR managers) of each organization was informed orally of the general nature of the study and asked to inquire about team members' interest in the survey to ensure voluntary participation. A package for each work team contained one supervisor survey and five team member surveys, with extra surveys in case teams exceeded five members. Each survey was distributed in an envelope that was also used for a return. The representative in each organization collected completed and sealed surveys from each team. Each questionnaire had a cover letter that explained the nature of the research and assured anonymity and confidentiality to participants. Contact information for the researcher was also included in the cover letter. The representative distributed surveys to team members within the groups in each organization. On completion, most of the respondents sealed their surveys in the envelopes provided and returned them through the representative. The representatives then handed the completed surveys from each team to the author.

Surveys were conducted two times with a 2-week interval. The second-round survey was distributed in the same way as explained above, two weeks after the completion of the first-round survey. The Time 1 survey contained items measuring individual-level trait affectivity and group-level justice climate. The Time 2 survey items included fairness evaluation of the scenarios as well as affective and behavioral responses to the scenarios.

Measures

Individual-level variables and team-level variables were measured over the two rounds of surveys. Individual-level variables included trait affectivity and behavioral responses to the scenarios. Team-level variables included procedural, distributive, informational and interpersonal justice climate. The Time 1 survey included individual trait affectivity and justice climate measures. The Time 2 survey included the other individual level variables including fairness evaluation of the scenarios and behavioral responses to the scenarios. Independent variables and dependent variables were measured at different time points to minimize common source bias. Descriptive statistics including means, standard deviations, and correlations are also presented in Table 1- 3.

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Insert Table 1 about here

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Insert Table 2 about here

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Insert Table 3 about here

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Negative affectivity (NA). Individual trait negative affectivity was measured using a 20-item scale, the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) in the Time 1 survey. Participants responded to the statement "Please indicate to what extent you have felt this way during the past week" on a 5-point Likert scale ranging from (1) not at all to (5) extremely. Each scale for positive affectivity (PA) and negative affectivity (NA) was constructed by averaging responses

to ten adjectives describing positive and negative affectivity. Scale reliability (Cronbach's coefficient α) was 0.94 and 0.91 for PA and NA respectively. Due to the high degree of correlation between PA and NA affectivity ($\alpha = -0.058$, $p < .05$), only NA was included in the model as an individual-level control variable.

Group-level justice. Group-level justice measures based on the four-factor model by Colquitt (2001) were used to analyze organizational justice in the Time 1 survey (Colquitt, 2001). Following the reference-shift consensus composition model (Chan, 1998), individuals rated team level justice – procedural, distributive, informational and interpersonal justice climate – with reference to team (e.g., in your team, a member of my team, the boss of my team, the procedure in my team).

Individuals read the following statements: "The following items refer to the procedures used to arrive at your outcomes in your team. To what extent have you been able to express your views and feelings during those procedures in your team [procedural justice climate]?" "The following items refer to your outcome in your team. To what extent does your outcome reflect the effort you have put into your work in your team [distributional justice climate]?" "The following items refer to your team leader. To what extent has he/she treated you in a polite manner [interpersonal justice climate]?" "The following items refer to your team leader. To what extent has he/she explained the procedures thoroughly [informational justice climate]?" All items used a 5-point Likert scale ranging from (1) to a small extent to (5) to a large extent.

Individual scores were aggregated to the team level. In order to construct the level-2 variables, individual responses to procedural justice climate, distributive justice climate, informational, and interpersonal justice climate were aggregated to the

team level. For construct validity, within-group agreement in members' perceptual ratings was examined by intra-class correlations (ICC (1) and ICC (2)) for each team-level variable.

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Insert Table 4 about here

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ICC (1) refers to intra-class correlations among members of the same team, showing similarity in patterns of ratings made by different raters. ICC (1) values for team-level justice climate ranged from 0.17 to 0.21, showing that at least 17% to 21% of the variance in ratings of justice climate is explained by team membership. On the other hand, ICC (2) shows the degree of reliability of team-level scores, that is, averaged scores for each team for respective variables. ICC (2) values were calculated and ranged from 0.51 to 0.56, with the average number of team members per group (k = 4.7). For additional support for aggregation of individual responses to the team level, inter-rater agreement, $r_{wg(j)}$ (James, Demaree, & Wolf, 1984) was examined for each team by comparing observed group variance to an expected random variance. The uniform distribution was chosen for comparison and averaged $r_{wg(j)}$ for each team level variables varied from 0.71 to 0.76.

***Responses to scenarios*.** Three scenarios – one each representing distributive justice violation, procedural justice violation, and interactional justice violation – were presented to the participants in random order in the beginning of the Time 2 survey. The first scenario described a situation where performance evaluation was unreflective of one's own effort and achievement (distributive justice violation). The second scenario included a situation where an employee received a unilateral notice of the

elimination of incentives without any discussion with employees and with a lack of voice in the decision-making process (procedural justice violation). The last scenario described inappropriate behavior of a supervisor, who often yells at employees or is inconsistent and does not consider people's opinion in making decisions (interactional justice violation). The contents of these scenarios, based on the interviews and media coverage described in the beginning of this section, thus reflect the reality of workplace events. Participants read the scenarios and answered the questions on the fairness of each scenario, and on their behavioral reactions.

Fairness evaluation. Participants evaluated the fairness of the scenarios by rating them on a 5-point Likert scale from very unfair (1) to very fair (5). The mean rating of fairness was 2.29 (*SD* = 0.8) for the distributive fairness violation scenario, 2.29 (*SD* = 0.8) for the procedural fairness violation scenario, and 1.83 (*SD* = 0.79) for interactional fairness violation scenario.

Behavioral reactions to the scenarios. For behavioral intentions after reading the fairness violation scenarios, participants indicated their intention to engage in behavioral options on a 5-point Likert scale from never (1) to actively pursue (5). Behavioral reactions included the following options: using a conflict management system (e.g., grievance procedure) in their organization (appeal), engaging in sensemaking with colleagues (colleague), reporting to a higher-level manager (report), and engaging in a collective action (collective action).

Control variables. Demographic information including sex (male = 1 female = 0), age, organizational tenure (in months), team tenure (in months), title, and team

characteristics including team size and function, and industry were included in both surveys.

Results

Preliminary Analyses

Tables 1-3 include descriptive statistics and correlations among variables in the models. Although included in the preliminary analyses, non-significant control variables were dropped from the model except for negative affectivity (NA) at the individual level and team size at the team level, after model comparisons were made by comparing deviance statistics.

Due to a few missing data points at the individual level, the hypothesized models were analyzed with five imputed datasets constructed from Markov Chain Monte Carlo (MCMC) methods. Rubin (1987) noted that multiple imputation (MI) is a Monte Carlo technique in which the missing values are replaced by $m > 1$ simulated versions, where m is typically small (e.g. 3-10, m = 5 in the current study). Based on the assumption that missing values are missing at random (MAR, Rubin, 1976), repeated imputation inference was made by analyzing each of the simulated complete datasets by standard methods. Then the results were combined to produce estimates and confidence intervals that incorporate missing-data uncertainty. Although no variable had more than 5% of missing values in the current dataset, the multiple imputation technique was applied to the analyses in order to avoid case deletion by statistical software. As case deletion generally leads to valid inferences only when missing data are missing completely at random (MCAR) in the sense that the probabilities of response do not depend on any data values observed or missing, which is a much

stronger assumption than the current assumption of MAR (Little & Rubin, 2002), the multiple imputation method was a more plausible choice.

Hierarchical linear modeling (HLM 7.0; Raudenbush, Bryk, & Congdon, 2010) was used to test the hypothesized cross-level moderating effects. At Level 1, individual-level outcome variables such as the four different behavioral options were regressed on negative affectivity. At Level 2, the pooled values of the Level 1 parameters were used as dependent variables that are predicted by the four facets of justice climate, controlling for team size. Level 2 variables were grand-centered for the interpretation of the effects. As can be seen in Table 5, an analysis of the unconditional means model, a null model with the only dependent variable being each behavioral reaction, showed that a significant portion of the total variances for each specific behavioral reaction could be explained by between-team variance.

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Insert Table 5 about here

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ICC values of dependent variables ranged from 0.03 to 0.13 (except collective action_1). In multi-level design where group mean is the unit of analysis, Level-2 variables should be accounted for in the model even if the ICC of the dependent variable is as small as 0.01, because the probability of Type I error is 0.06 even when the number of entities is 10 in one group and ICC is 0.01, and it becomes larger with larger ICC values and an increase in the number of entities (Barcikowski, 1981).

Moderation of justice climate in the relationship between the fairness evaluation and using formal conflict resolution procedures (appeal)

Hypothesis 1 predicted a moderating role of justice climate on the relationship between the fairness evaluation and appeal behavior. Using a slope-as-outcomes model, the moderating role of justice climate variables was analyzed. Level 2 variables including justice climate variables (PJC, DJC, IFJC, IPJC) and team size were modeled to have effects on Level 1 intercept and slopes for the fairness evaluation (Fair_1, Fair_2, and Fair_3 for each model) on appeal behavior (Appeal_1, Appeal_2, and Appeal_3, respectively). The four facets of justice climate and team size as the control variable were modeled to interact with the fairness evaluation of the scenario and negative affectivity, which was the level 1 control variable.

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Insert Table 6 about here

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As shown in Table 6, procedural justice climate showed significant moderating influences on the relationship between Fair_1 and Appeal_1, and Fair_2 and Appeal_2. Specifically, consistent with Hypotheses 1a, procedural justice climate moderated the relationship such that people showed more appeal behavior when facing unfairness under high levels of procedural justice. In addition, informational justice climate moderated the relationship between Fair_1 and Appeal_1 ($\gamma_{25} = 0.55$, $SE = 0.19$), $t(67) = 2.86$, $p < .05$ (Hypothesis 1c), and distributive justice climate moderated the relationship between Fair_3 and Appeal_3 ($\gamma_{24} = 0.7$, $SE = 0.25$), $t(67) = 2.84$, $p < .05$ (Hypothesis 1b). The patterns of these interactions are depicted in Figure 2.

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Insert Figure 2 about here

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Moderation of justice climate in the relationship between the fairness evaluation and remedial voice (report)

Hypotheses 2 predicted a moderating role of justice climate on the relationship between the fairness evaluation and remedial voice behavior (report). Using a slope-as-outcomes model, the moderating role of justice climate variables was analyzed. Level 2 variables including justice climate variables (PJC, DJC, IFJC, IPJC) and team size were modeled to have effects on Level 1 intercept and slopes for the fairness evaluation (Fair_1, Fair_2, and Fair_3 for each model) on report behavior (Report_1, Report_2, and Report3, respectively). The four facets of justice climate and team size as the control variable were modeled to interact with the fairness evaluation of the scenario and negative affectivity, which was the level 1 control variable.

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Insert Table 7 about here

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As shown in Table 7, procedural justice climate also showed significant moderating influences on the relationship between Fair_1 and Report_1, and Fair_2 and Report_2. Specifically, consistent with Hypothesis 2a, procedural justice climate moderated the relationship such that people showed more report behavior when facing unfairness under high levels of procedural justice. In addition, informational justice climate moderated the relationship between Fair_1 and Report_1 (γ_{25} = 0.66, *SE* = 0.2), t(67) = 3.27, p < .05 (Hypothesis 2c). There was no significant moderating effect found in the relationship between Fair_3 and Report_3. The significant interactions are depicted in Figure 3.

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Insert Figure 3 about here

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Moderation of justice climate in the relationship between the fairness evaluation and sensemaking (colleague, report)

Hypotheses 3a, 3b and 3c predicted a moderating role of justice climate on the relationship between the fairness evaluation and sensemaking behavior (colleague). Using a slope-as-outcomes model, the moderating role of justice climate variables was analyzed. Level 2 variables including justice climate variables (PJC, DJC, IFJC, IPJC) and team size were modeled to have effects on Level 1 intercept and slopes for the fairness evaluation (Fair_1, Fair_2, and Fair_3 for each model) on colleague(Colleague_1, Colleague_2, and Colleague_3, respectively). The four facets of justice climate and team size as the control variable were modeled to interact with the fairness evaluation of the scenario and negative affectivity, which was the level 1 control variable.

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Insert Table 8 about here

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As shown in Table 8, consistent with Hypothesis 3b, distributive justice climate showed significant moderating influences on the relationship between Fair_1 and Colleague_1, and Fair_2 and Colleague_2. In addition, procedural justice climate also moderated the relationship between Fair_2 and Colleague_2 , and Fair_3 and Colleague_3 (Hypothesis 3a). With regard to this sensemaking behavior, an interesting pattern of interactions was found, such that people were more likely to try to sense-

make with others when the fairness violation was in stark contrast to the existing levels of justice climate. For example, people under high levels of procedural justice climate tended to talk more with their colleagues about the violation of procedural fairness and those under high levels of distributive justice climate tended to talk more with their colleagues about the violation of distributive fairness. Figure 4 presents these significant interactions.

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Insert Figure 4 about here

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Moderation of justice climate in the relationship between the fairness evaluation and collective action

Hypotheses 4 predicted a moderating role of justice climate on the relationship between the fairness evaluation and collective action. Using a slope-as-outcomes model, the moderating role of justice climate variables was analyzed. Level 2 variables including justice climate variables (PJC, DJC, IFJC, IPJC) and team size were modeled to have effects on Level 1 intercept and slopes for the fairness evaluation (Fair_1, Fair_2, and Fair_3 for each model)on collective action(Collective_1, Collective_2, and Collective 3, respectively). The four facets of justice climate and team size as the control variable were modeled to interact with the fairness evaluation of the scenario and negative affectivity, which was the level 1 control variable.

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Insert Table 9 about here

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Table 9 shows that interpersonal justice climate significantly moderated the relationship between Fair_1 and Collective action_1 (γ_{23} = -0.65, *SE* = 0.19), t(67) = -3.45, p < .001, as proposed in Hypothesis 4c. People under high levels of interpersonal justice climate tended to engage in collective action more than others. Figure 5 presents this pattern of interaction. _ _ _ _ _ _ _ _ _ _ _ _

Insert Figure 5 about here

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Discussion

The present article tries to expand the organizational mistreatment model (Olson-Buchannan & Boswell, 2008) by elaborating the role of group-level justice in individuals' affective and behavioral reactions to mistreatment. The current model proposes that group –level justice can be regarded as a precursor to the usage of conflict resolution procedures in organizations. By linking the use of conflict resolution procedures to the framework of affective events theory, the expanded model of organizational mistreatment provides a broader and more detailed picture of micro-level processes that have not been fully explored in conflict resolution research.

The present research used three different fairness violation scenarios to examine individual responses to unfair events. In the case of the distributive fairness violation, people engaged in more sensemaking under high levels of distributive justice climate as the violation of distributive fairness is a rare event to them. When they had high levels of procedural justice climate, this violation of distributive fairness led them to use an appeal system more or to report to a higher-level manager, as these procedures are stable and trustworthy. Under high levels of interactional justice climate, people

were less likely to appeal or report, but rather engaged in collective action against the distributive fairness violation.

The procedural fairness violation led people to engage in more sensemaking under high levels of procedural justice climate as it is rare for them to experience such mistreatment. People also engaged in more appeals and more reporting under high levels of procedural justice climate to restore justice using the fair and consistent procedures that they knew existed in their organization. In the case of the interactional fairness violation, people talked more about the inconsistent and inappropriate behaviors of the leader under low procedural justice climate as they do not believe formal systems will be administered in a fair manner. However, under high levels of distributive group-level justice, they were more willing to appeal in the case of inappropriate behaviors of the leader.

There are far more issues to be discussed regarding the model and construct proposed here. Given multi-dimensions of justice perception (i.e., procedural, distributive and interactional justice), group-level justice can have weighted emphasis on the specific type of justice. It is possible that some group-level justice focuses more on distributive justice aspect (i.e., equity norm), while other group-level justice can place more emphasis on fair procedures (i.e., non-discriminatory nature of organizational policy), and other groups may have more salient norms for the interactional justice aspect. According to the weighted focus on the type of justice, individual employees may have a stronger reaction to a violation of the justice that has been emphasized by the group-level justice that they have experienced. As shown in the findings, people tended to engage in more sense-making when they faced

distributive fairness violation under high-levels of distributive justice climate. In addition, people under high levels of procedural justice climate were more concerned and wanted to talk to their colleagues when faced with procedural fairness violation.

The influence of unfairness in the workplace can be very complex, and understanding cross-level interactions of justice climate can help to clarify these complex patterns. As reactions to unfairness, various negative emotions and subsequent behaviors may harm teams and organizations as well as individual employees themselves. However, to understand when and why people engage in certain behaviors as a result of their perception of unfairness, the role of group-level justice climate should be examined in the context of the particular instance of mistreatment. Sometimes managers can understand the use of formal conflict resolution procedures as beneficial, since it may signal high levels of procedural justice climate and legitimacy and trust in the system. In order to design and implement appropriate conflict resolution procedures in an organization, the existing levels of justice climate should be considered so as to understand what types of behaviors individuals actually engage in a given situation.

APPENDICES

Table 1. Descriptive Statistics and Correlations for Reactions to Distributive Justice Violation [a]

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1.PJC	3.92	0.87	_										
2.DJC	3.2	0.86	0.53**	_									
3.IPJC	4.22	0.86	0.69**	0.41**	_								
4.IFJC	3.65	0.8	0.66**	0.55**	0.06**	_							
5.NA	2.39	0.78	-0.46**	-0.34**	-0.42**	-0.49**	_						
6.Fairness_1	2.29	0.79	0.09	0.17**	0.01	0.11	-0.03	_					
7.Appeal_1	2.37	0.99	-0.01	0.01	-0.1	-0.02	0.09	-0.13*	_				
8.Report_1	2.32	0.99	0.01	0.06	-0.08	0.04	0.03	-0.08	0.66**	_			
9.Colleague_1	3.46	0.93	-0.07	-0.18**	-0.03	-0.05	0.02	-0.17**	0.06	0.08	_		
10.Collective_1	1.98	0.98	-0.12	-0.09	-0.18**	-0.04	0.14*	-0.04	0.4**	0.39**	0.09	_	
11.Team size	5.28	2.32	0.08	0.13*	0.07	0.08	-0.06	-0.01	-0.08	-0.13*	-0.06	0.06	_

[a] This table shows means, standard deviations, and correlations with variables in the model. N=333 individuals

*p < .05

**p < .01

Table 2. Descriptive Statistics and Correlations for Reactions to Procedural Justice Violation [a]

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1.PJC	3.92	0.87	_										
2.DJC	3.2	0.86	0.53**	_									
3.IPJC	4.22	0.86	0.69**	0.41**	_								
4.IFJC	3.65	0.8	0.66**	0.55**	0.06**	_							
5.NA	2.39	0.78	-0.46**	-0.34**	-0.42**	-0.49**	_						
6.Fairness_2	2.29	0.8	0.13*	0.26**	0.02	0.14*	0.07	_					
7.Appeal_2	2.34	1.08	-0.07	-0.1	-0.09	-0.09	0.13*	-0.12*	_				
8.Report_2	2.3	1.05	-0.08	-0.09	-0.09	-0.08	0.11*	-0.08	0.7**	_			
9.Colleague_2	3.56	1.01	-0.07	-0.21**	0.06	-0.07	0.04	-0.29**	0.15**	0.17**	_		
10.Collective_2	2.17	1.14	-0.19**	-0.17**	-0.12*	-0.11*	0.14*	-0.13*	0.49**	0.41**	0.23**	_	
11.Team size	5.28	2.32	0.08	0.13*	0.07	0.08	-0.06	0.05	-0.01	-0.01	0.00	0.05	_

[a] This table shows means, standard deviations, and correlations with variables in the model. N=333 individuals

*p < .05

**p < .01

Table 3. Descriptive Statistics and Correlations for Reactions to Interactional Justice Violation [a]

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1.PJC	3.92	0.87	_										
2.DJC	3.2	0.86	0.53**	_									
3.IPJC	4.22	0.86	0.69**	0.41**	_								
4.IFJC	3.65	0.8	0.66**	0.55**	0.06**	_							
5.NA	2.39	0.78	-0.46**	-0.34**	-0.42**	-0.49**	_						
6.Fairness_3	1.83	0.79	-0.06	0.02	-0.12*	-0.02	0.11	_					
7.Appeal_3	2.95	1.21	-0.02	0.04	-0.004	-0.01	0.02	-0.15**	_				
8.Report_3	2.8	1.21	0.03	-0.01	-0.02	-0.01	0.03	-0.09	0.73**	_			
9.Colleague_3	3.8	1.03	-0.03	-0.12*	0.05	-0.09	0.05	-0.34**	0.32**	0.29**	_		
10.Collective_3	2.38	1.17	-0.12*	-0.09	-0.03	-0.002	0.13*	0.03	0.48**	0.48**	0.31**	_	
11.Team size	5.28	2.32	0.08	0.13*	0.07	0.08	-0.06	0.00	-0.01	-0.03	0.02	0.01	_

[a] This table shows means, standard deviations, and correlations with variables in the model. N=333 individuals

*p < .05

**p < .01

Table 4. Intra-class Correlations and Inter-rater Agreement for Level-2 Variables

Level 2 Variables	N	Means	Standard Deviations	ICC (1)	ICC (2)	$Rwg_{\_un}$ [a]
Procedural Justice Climate	73	3.92	0.87	0.19	0.53	0.73
Distributive Justice Climate	73	3.20	0.86	0.2	0.53	0.72
Informational Justice Climate	73	3.65	0.80	0.21	0.56	0.76
Interpersonal Justice Climate	73	4.21	0.86	0.18	0.51	0.71

[a] $rwg_{\_un}$ is an averaged $rwg(j)_{\_un}$ across teams. $rwg(j)_{\_un}$ is within group agreement index that is calculated by comparing an observed group variance to an expected random variance (James et al.,1984).

Table 5. Hierarchical Linear Modeling Estimations of Null Models

Dependent Variable	γ_{00}	σ^2	τ_{00}	**Intraclass correlations**
Appeal_1	2.38	0.93	0.05*	0.05
Appeal_2	2.34	1.11	0.07*	0.06
Appeal_3	2.95	1.36	0.14**	0.09
Report_1	2.33	0.94	0.04	0.04
Report_2	2.32	1.045	0.07*	0.06
Report_3	2.79	1.47	0.003	0.002
Colleague_1	3.46	0.767	0.1**	0.12
Colleague_2	3.55	0.99	0.03	0.03
Colleague_3	3.8	1.06	0.001	0
Collective action_1	1.98	0.92	0.06*	0.06
Collective action_2	2.16	1.16	0.17**	0.13
Collective action_3	2.38	1.3	0.08**	0.06

Note. N = 333. γ_{00} = pooled intercept; σ^2 = within-team variance; τ_{00} = between-team variance; Intra-class correlations
ICC = $\tau_{00}/(\sigma^2 + \tau_{00})$. *p < .05, **p < .001

Table 6. Results of Analyses of the Moderating Effects of Justice Climate in Fairness - Appeal Slope [a]

Variable	Appeal	
Level 2	**Coefficient (γ_{ii})**	**T (df=67)**
Fairness 1 Slope β_2		
Intercept γ_{20}	-0.18	-2.66*
Team size γ_{21}	-0.002	-0.1
Procedural justice climate γ_{22}	-0.44	-2.23*
Interpersonal justice climate γ_{23}	-0.26	-1.51
Distributive justice climate γ_{24}	0.23	1.24
Informational justice climate γ_{25}	0.55	2.86*
Fairness 2 Slope β_2		
Intercept γ_{20}	-0.14	-1.85
Team size γ_{21}	-0.06	-1.95
Procedural justice climate γ_{22}	-0.56	-2.51*
Interpersonal justice climate γ_{23}	-0.28	-1.75
Distributive justice climate γ_{24}	0.28	1.2
Informational justice climate γ_{25}	0.38	1.61
Fairness 3 Slope β_2		
Intercept γ_{20}	-0.39	-4.51**
Team size γ_{21}	0.02	0.43
Procedural justice climate γ_{22}	-0.34	-1.19
Interpersonal justice climate γ_{23}	-0.44	-1.9
Distributive justice climate γ_{24}	0.7	2.84*
Informational justice climate γ_{25}	0.41	1.36

[a] This table shows the results of three slope-as-outcome analyses with Fairness _1, Fairness_2, and Fairness 3 respectively on Appeal behavior. Level 1 n= 333 individuals; Level 2 n=73 teams. Level 2 variables were centered by the grand mean. For each model, fairness slope β_2 was regressed on level 2 variables, and the t-tests associated with the γ_{22} –γ_{25} parameters show the relationship between each justice climate dimension and fairness evaluation-appeal slopes, testing the cross-level moderating effects of justice climate. *p < .05, **p < .01

Table 7. Results of Analyses of the Moderating Effects of Justice Climate in Fairness - Report Slope [a]

Variable	**Report**	
Level 2	**Coefficient (γ_{ij})**	**T (df=67)**
Fairness 1 Slope β_2		
Intercept γ_{20}	-0.15	-1.91
Team size γ_{21}	0.04	1.58
Procedural justice climate γ_{22}	-0.6	-2.61*
Interpersonal justice climate γ_{23}	-0.11	-0.64
Distributive justice climate γ_{24}	0.09	0.51
Informational justice climate γ_{25}	0.66	3.27*
Fairness 2 Slope β_2		
Intercept γ_{20}	-0.16	-1.89
Team size γ_{21}	-0.004	-0.13
Procedural justice climate γ_{22}	-0.62	-2.88*
Interpersonal justice climate γ_{23}	-0.07	-0.35
Distributive justice climate γ_{24}	0.24	0.92
Informational justice climate γ_{25}	0.52	1.8
Fairness 3 Slope β_2		
Intercept γ_{20}	-0.24	-2.76*
Team size γ_{21}	0.02	0.69
Procedural justice climate γ_{22}	0.02	0.06
Interpersonal justice climate γ_{23}	-0.25	-1.09
Distributive justice climate γ_{24}	0.4	1.55
Informational justice climate γ_{25}	-0.09	-0.36

[a] This table shows the results of three slope-as-outcome analyses with Fairness _1, Fairness_2, and Fairness 3 respectively on Report behavior. Level 1 n= 333 individuals; Level 2 n=73 teams. Level 2 variables were centered by the grand mean. For each model, fairness slope β_2 was regressed on level 2 variables, and the t-tests associated with the γ_{22} –γ_{25} parameters show the relationship between each justice climate dimension and fairness evaluation-report slopes, testing the cross-level moderating effects of justice climate. *p < .05, **p < .01

Table 8. Results of Analyses of the Moderating Effects of Justice Climate in Fairness - Colleague Slope [a]

Variable	Colleague	
Level 2	**Coefficient (γ_{ii})**	**T (df=67)**
Fairness 1 Slope β_2		
Intercept γ_{20}	-0.20	-2.85**
Team size γ_{21}	0.01	0.39
Procedural justice climate γ_{22}	-0.09	-0.4
Interpersonal justice climate γ_{23}	0.09	0.48
Distributive justice climate γ_{24}	0.35	2.03*
Informational justice climate γ_{25}	0.01	0.05
Fairness 2 Slope β_2		
Intercept γ_{20}	-0.37	-5.64**
Team size γ_{21}	0.02	0.96
Procedural justice climate γ_{22}	-0.69	-3.51**
Interpersonal justice climate γ_{23}	0.06	0.35
Distributive justice climate γ_{24}	0.48	2.66*
Informational justice climate γ_{25}	0.12	0.62
Fairness 3 Slope β_2		
Intercept γ_{20}	-0.50	-7.95**
Team size γ_{21}	0.04	2.58*
Procedural justice climate γ_{22}	0.63	2.99**
Interpersonal justice climate γ_{23}	0.05	0.21
Distributive justice climate γ_{24}	-0.27	-1.21
Informational justice climate γ_{25}	-0.14	-0.65

[a] This table shows the results of three slope-as-outcome analyses with Fairness _1, Fairness_2, and Fairness 3 respectively on Colleague behavior. Level 1 n= 333 individuals; Level 2 n=73 teams. Level 2 variables were centered by the grand mean. For each model, fairness slope β_2 was regressed on level 2 variables, and the t-tests associated with the γ_{22} –γ_{25} parameters show the relationship between each justice climate dimension and fairness evaluation-colleague slopes, testing the cross-level moderating effects of justice climate. *p < .05,**p < .01

Table 9. Results of Analyses of the Moderating Effects of Justice Climate in Fairness - Collective Action Slope [a]

Variable	Collective action	
Level 2	**Coefficient (γ_{ij})**	**T (df=67)**
Fairness 1 Slope β_2		
Intercept γ_{20}	-0.08	-1.2
Team size γ_{21}	0.03	1.12
Procedural justice climate γ_{22}	0.23	1.32
Interpersonal justice climate γ_{23}	-0.65	-3.45**
Distributive justice climate γ_{24}	0.35	1.86
Informational justice climate γ_{25}	0.004	0.02
Fairness 2 Slope β_2		
Intercept γ_{20}	-0.14	-1.68
Team size γ_{21}	-0.006	-0.17
Procedural justice climate γ_{22}	0.2	0.82
Interpersonal justice climate γ_{23}	-0.33	-1.45
Distributive justice climate γ_{24}	0.22	0.65
Informational justice climate γ_{25}	0.01	0.04
Fairness 3 Slope β_2		
Intercept γ_{20}	-0.06	-0.7
Team size γ_{21}	0.02	0.41
Procedural justice climate γ_{22}	0.2	0.68
Interpersonal justice climate γ_{23}	-0.37	-1.29
Distributive justice climate γ_{24}	0.17	0.62
Informational justice climate γ_{25}	-0.08	-0.31

[a] This table shows the results of three slope-as-outcome analyses with Fairness _1, Fairness_2, and Fairness 3 respectively on Collective action. Level 1 n= 333 individuals; Level 2 n=73 teams. Level 2 variables were centered by the grand mean. For each model, fairness slope β_2 was regressed on level 2 variables, and the t-tests associated with the γ_{22} –γ_{25} parameters show the relationship between each justice climate dimension and fairness evaluation-collective action slopes, testing the cross-level moderating effects of justice climate. *p < .05, **p < .01

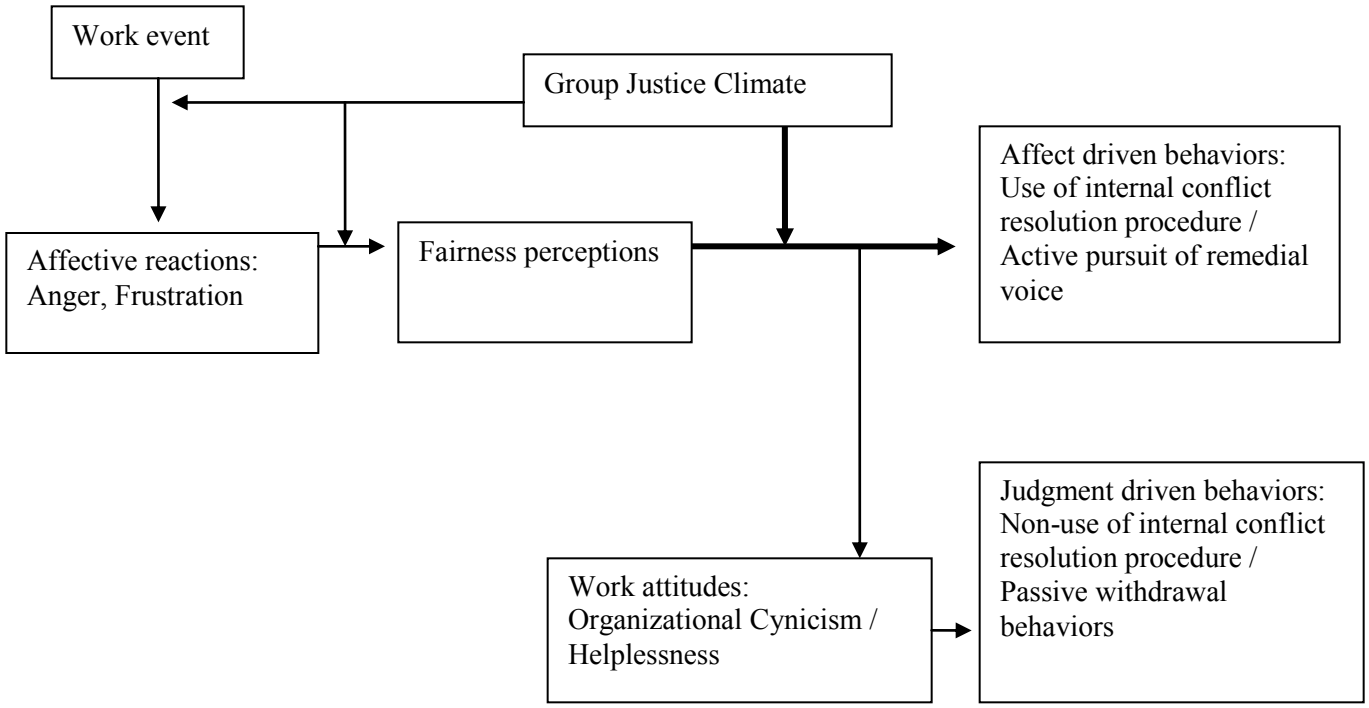

Figure 1. Theoretical model (bold arrows are tested in the current study)

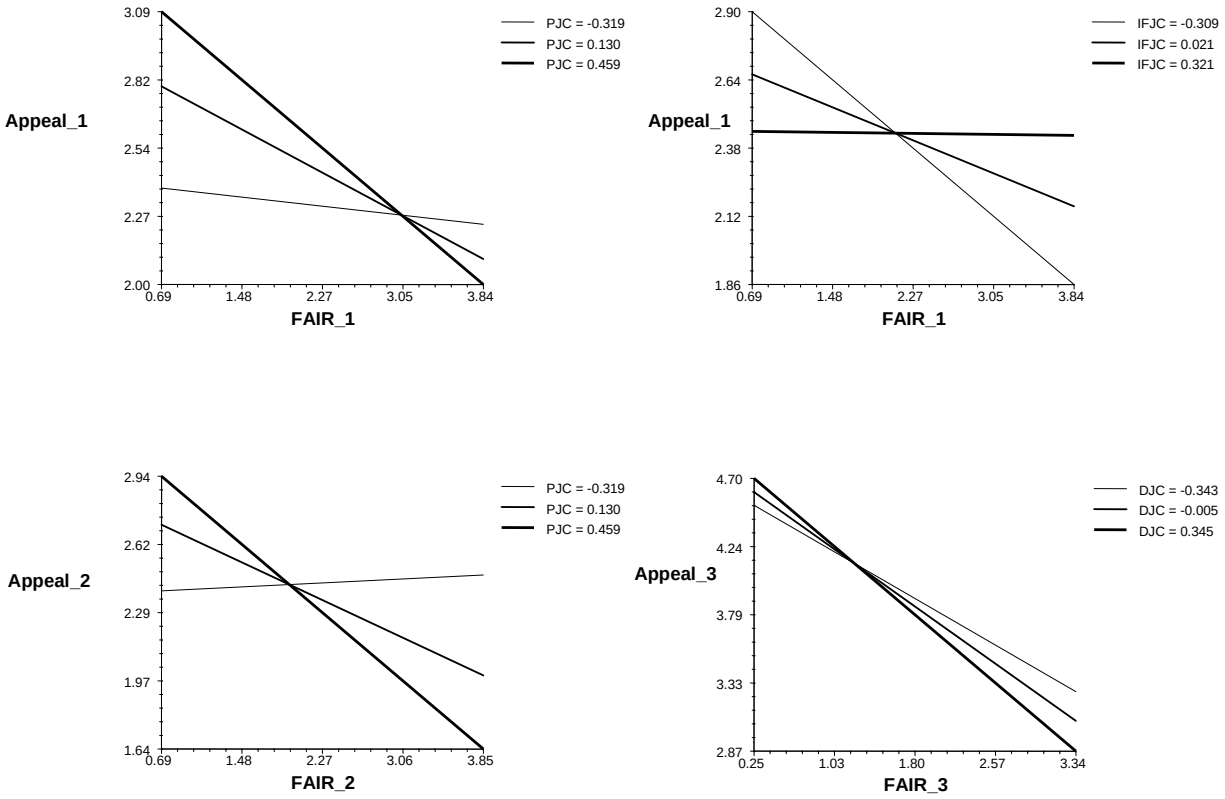

Figure 2. Moderating Role of Justice Climate in the Relationship Between the Fairness Evaluation and Appeal

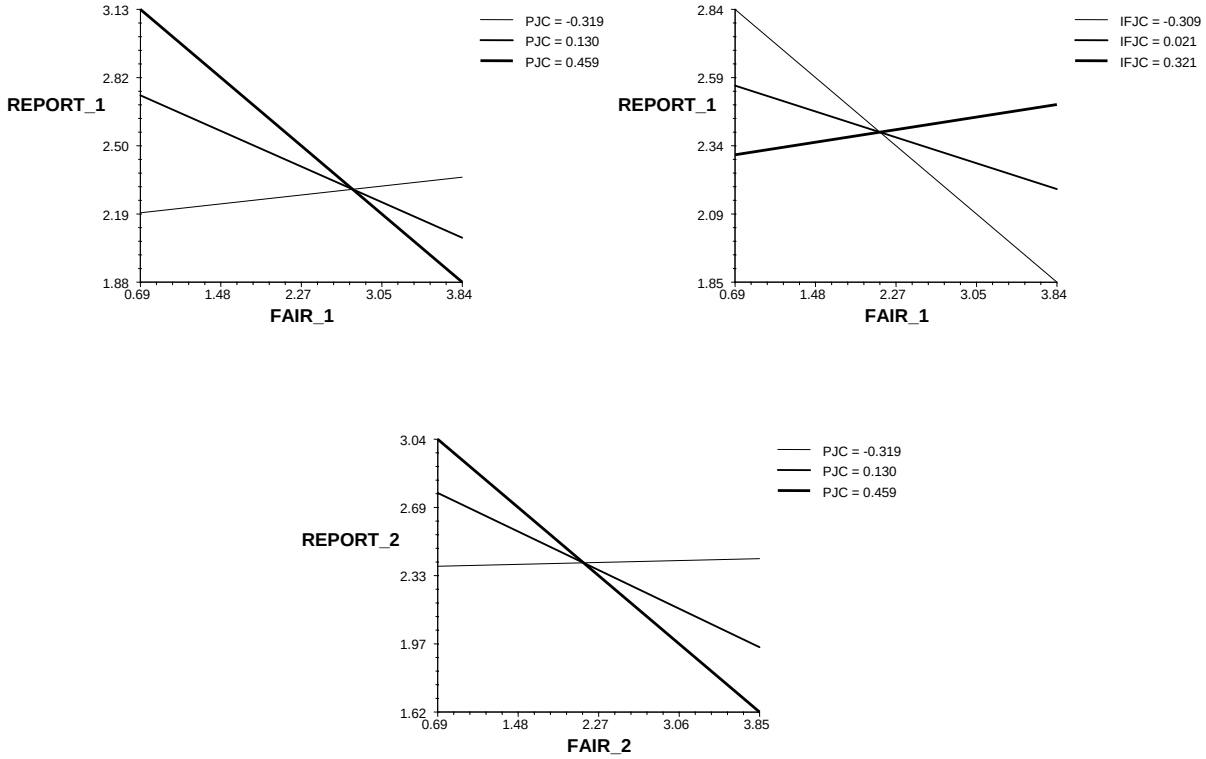

Figure 3. Moderating Role of Justice Climate in the Relationship Between the Fairness Evaluation and Report

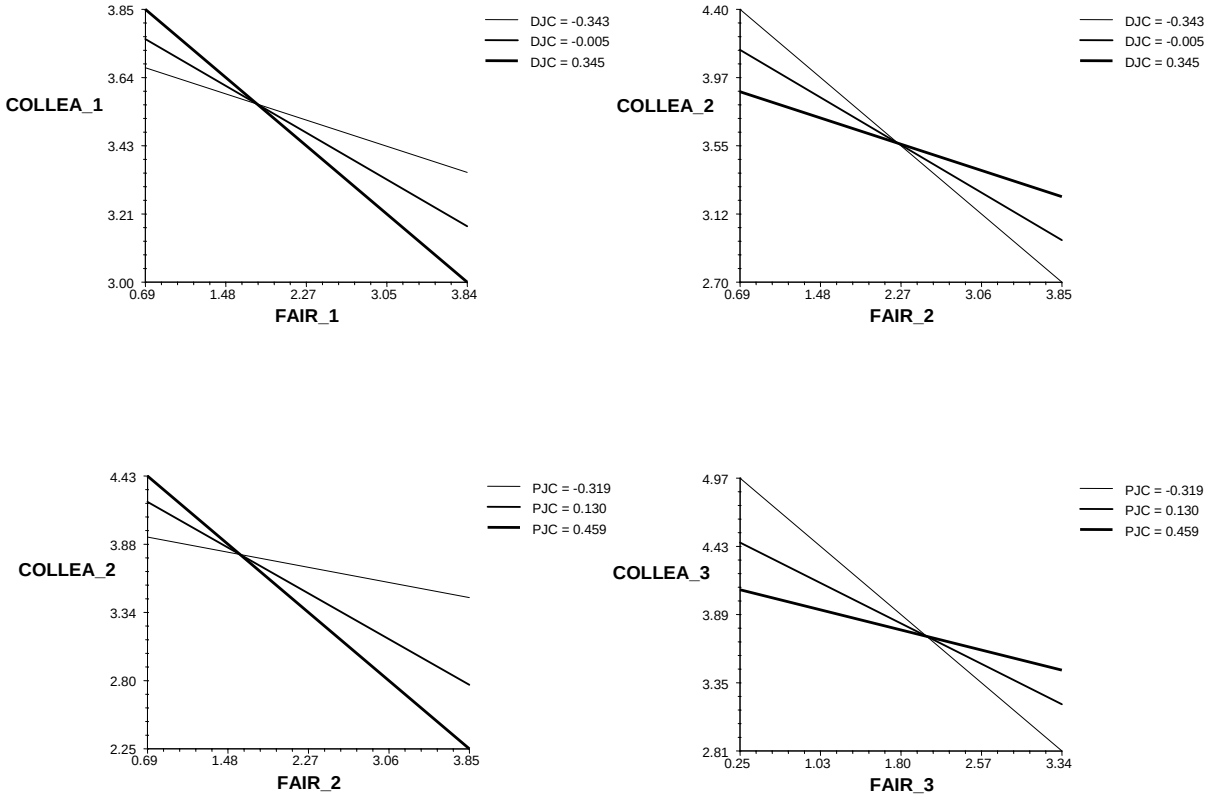

Figure 4. Moderating Role of Justice Climate in the Relationship Between the Fairness Evaluation and Sensemaking with Colleague

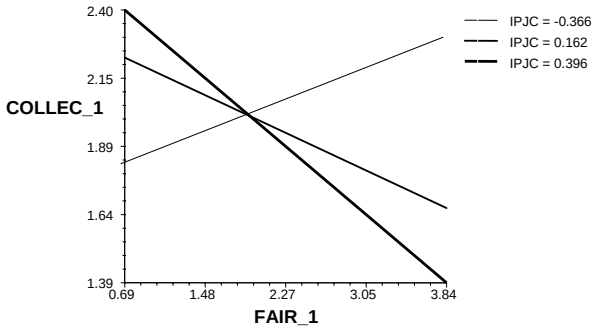

Figure 5. Moderating Role of Justice Climate in the Relationship Between the Fairness Evaluation and Collective Action

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CHAPTER 3

THE MODERATING ROLE OF JUSTICE CLIMATE IN INDIVIDUALS' NEGATIVE EMOTIONAL REACTIONS TO UNFAIRNESS

Organizational justice research has examined how people think about their rewards, the procedure used to make outcome decisions, and the people who deliver the outcomes and manage the process. The perception of fairness of these aspects of organizations constitutes an integral part of organizational life. Research about emotions in organizations has shown that many work-related behaviors are influenced by employees' moods, emotions, and dispositional affect. As one of many work-related events, the experience of unfairness or injustice in the workplace is an emotionally laden process (Bies & Tripp, 1996). Affective events theory (Weiss & Cropanzano, 1996) posits that work events are proximal causes of affective reactions, and thus the experience of unfairness in the workplace is an important source of negative affective reactions.

The present research focuses on the impact of group-level justice on the formation of individual affective reactions to unfair events. Although the relationship between emotions and perceptions of fairness is thought to be natural and simple, research on the issue has shown more complex patterns. Many researchers have focused on the role of justice perceptions as a cause of moods and emotions, while other researchers considered affect as a predictor of justice judgments. In addition, the construct of organizational justice itself is categorized into three specific types of

justice (e.g., distributive, procedural, and interactional) that are often investigated separately, and the construct of affect varies depending on whether researchers focus on moods, trait affect, or distinct emotions. Moreover, much of the correlational research conducted in the field has found that emotions and justice perception mediate the relationships between justice events and other behavioral variables.

Although research on justice and emotion has been informative, it has been conducted mostly at the individual level. The experience of justice in the workplace is shaped within that social context. When faced with injustice-triggering mistreatment, individual employees try to make sense of such situations through sensemaking with third party others and seek to respond to the interpreted mistreatment in various ways (Olson-Buchannan & Boswell, 2008). Therefore, interactions with other workgroup members, justice-related precedents in the workplace, characteristics of management by team leaders, and collective sensemaking processes are factors that might lead to the development of shared perceptions.

Despite this social nature of justice, group-level organizational justice has a fairly short history of research. Procedural justice climate (Naumann & Bennett, 2000) refers to distinct team-level cognition regarding how fairly the team as a whole is treated procedurally. Similar to procedural justice in meaning, team justice (Roberson & Colquitt, 2005) has focused more on the processes through which such perceptions develop, with a special emphasis on the role of interaction between team members, while justice climate has been conceptualized as similar to individual justice perceptions in their content and operations but with a focus on the unit as a referent.

The present research argues that individuals in a group use group-level justice as a reference point for their own evaluation of unfair events. While group-level justice is achieved through sensemaking and social influence (Roberson & Colquitt, 2005), it also works as a standard for individuals to make fairness judgments, such that individual members' affective and behavioral reactions are affected by pre-existing level of team justice in a group. Developed from referent cognition theory, fairness theory (Folger & Cropanzano, 2001) argued that individuals evaluate behaviors based on counterfactual thinking, generating alternatives about what would have happened if the behavior had not occurred, whether the perpetrator could have behaved differently, and whether the perpetrator should have behaved the way he or she did. In this sense, group-level justice offers a strong experiential basis for inducing different individual-level affective reactions. As perceptions of unfairness intensify to the extent that the behaviors could have been avoided in a group, affective reactions following an experience of injustice will differ by the level of group-level justice.

The present research explores this affective mechanism that links group-level justice and individual-level reactions. Building on the affective events theory framework (Weiss & Cropanzano, 1996) and justice and emotion literature, the role of group-level justice in shaping affective and behavioral reactions to work events is examined.

Emotional Reactions to Injustice

Research on the relationship between justice and emotions is based mostly on appraisal theories. The emotions that are assumed to follow an appraisal are assumed to be related to the pattern of evaluated actions and their outcomes, and to whether the

focus of interest is oneself or someone else. Affective events theory (Weiss & Cropanzano, 1996) has been one of the widely applied theoretical frames in this area. Affective events theory posits that individuals form perceptions of the environment, with the justice dimension being one example, and these evaluations of the environment will lead to a particular emotion (Weiss & Cropanzano, 1996). In an organizational context, employees appraise various organizational events and then experience certain emotions which further influence their attitude and behaviors.

Many researchers have conducted studies of reactions to injustice that involved discrete emotions, using either scenarios of injustice or naturally occurring experiences of emotions and injustice, and asking participants to describe their thoughts, feelings, and behavioral reactions. Researchers also have drawn upon emotion scripts to study emotions in organizations. As anger-eliciting events, people recalled events that involved unfair treatment by others (Fitness, 2000), and injustice initiated by supervisors and organizations (Gibson, 1995). Mikula et al.(1998) showed that events regarded as unjust elicited feelings that were longer in duration and more intense, and provoked many different negative emotions including anger, sadness, and disgust (Mikula, Scherer, & Athenstaedt, 1998). Although anger and resentment were the most frequently reported emotional reactions to injustice, other emotions such as disappointment, surprise, helplessness, depression, envy, and jealousy have also been found to be reactions to unfairness, depending on the context (e.g., Clayton, 1992; Hegtvedt, 1990; Mikula, 1986; Mikula et al., 1998; Sprecher, 1986; Sprecher, 1992; van Dijk & Zeelenberg, 2002).

In the early stage of organizational justice research, equity theory, focusing on the distributive aspect of justice, proposed that any perception of injustice leads to a negative emotional state of distress that, in turn, motivates the search for redress of the inequity (Adams, 1965; Walster, Walster, & Berscheid, 1978). Homans (1974) argued that those treated fairly will experience positive emotions, whereas those who are under-rewarded are likely to feel anger and those who are over-rewarded are more likely to feel guilty, and these predictions were tested by Austin and Walster (1974). Hegtvedt (1990) found similar results –

over-rewarded participants experienced less distress and resentment than equitably rewarded participants, but experienced guilt most strongly, and under-rewarded participants experienced the highest levels of distress, resentment, and helplessness (Hegtvedt, 1990).

Focusing more on the role of emotions in reaction to procedural injustice, several features of procedures were tested in experimental settings (Cropanzano & Folger, 1989; H.Weiss, Suckow, & Cropanzano, 1999). An unfair outcome coupled with an unfair process produced negative emotions among participants (Cropanzano & Folger, 1989), and a favorable outcome coupled with a biased procedure in favor of the participants produced guilt, while an unfavorable outcome coupled with a procedure that was biased against the participant elicited anger. Vermunt et el. (1996) also found that the more inaccurate the current procedure was compared with the referent, being previously experienced procedures, the more negative affect the participants experienced (Vermunt, Wit, van den Bos, & Lind, 1996).

Beyond one's emotional reactions to unfairness to oneself, the deontic justice model (Folger & Skarlicki, 2005) proposes that people can react with anger to injustice done to others. Various emotional reactions besides anger at injustice done to others were also shown, including guilt, sympathy, fear, hopelessness and content (Montada & Schneider, 1989). Turillo et al. (2002) found that third party individuals showed the highest levels of anger when the offensive behavior was portrayed to them as intentional rather than unintentional (Turillo, Folger, Lavelle, Umphress, & Gee, 2002). The perceived accountability and morality of the perpetrator was the main determinant for their emotional reactions. Focusing on the effect of interactional justice on the emotional reaction, Stecher and Rosse (2005) showed that low distributive justice or low interactional justice elicited high levels of negative affect (anger, resentment, and bitterness), while procedural justice had no main effect on negative affect (Stecher & Rosse, 2005).

Moderating Effects of Group-level Justice

In an organizational context, individuals continually interact with others, especially with members within a group, and their perceptions of fairness are shaped in this social context. Recently several researchers have suggested that justice should be considered as a group-level construct as well as an individual-level construct. As the most important group-level justice construct, justice climate (Naumann & Bennett, 2000) is defined as group-level cognition about how a work group as a whole is treated. It is the perception of group members of how they are affected by outsiders. The collective perception of fairness is argued to emerge from interactions among peers (Roberson & Colquitt, 2005), and this process is especially strong when the team

is cohesive (Naumann & Bennett, 2000) or when group members work interdependently (Roberson, 2006).

In line with the three-factor model of organizational justice, procedural justice climate is thought to originate from group members' shared experiences in dealing with organizational policies and practices (Colquitt et al., 2001). How organizational policies are enacted in a group, or how the group is affected by certain organizational practices, can contribute to the development of procedural justice climate. In addition, interactional justice climate can originate from patterns of interaction within a team, including interpersonal treatment between team members of by a manager and information exchange between group members. In this sense, intraunit justice climate (Li & Cropanzano, 2009), which refers to the way people who are part of a group treat one another, can be considered as interactional justice climate, or interpersonal justice climate following Greenberg (1993)'s distinction.

Group-level justice has been found to predict many workplace outcomes such as performance, organizational citizenship behavior and turnover, just as individual-level justice does (Liao & Rupp, 2005; Lin et al., 2007; Simons & Roberson, 2003). The present research assumes that group-level justice will also predict members' affective reactions to justice, as it provides certain normative expectations about how things should be administered or how people should behave towards each other.

Group-level justice with normative elements can regulate behaviors of group members. As group norms refer to a set of informal rules of expectations and behavior, justice climate can be explained as outcomes of social processes through which group justice norms influence individuals' reactions. As it is assumed that group-level

justice can regulate behaviors regarding the implementation of organizational policies and practices, fairer and consistent administration is expected under strong group justice norms. With this elevated normative expectation, individuals react to unjust events differently than those with lower expectations in a group with low levels of group-level justice. Therefore, it is proposed here that group-level justice constructs are expected to influence group members' affective reactions.

Perceived unfairness or injustice has been argued to be an important dimension in emotion-antecedent appraisal (Mikula et al., 1998). While perceived injustice may increase the likelihood of an anger reaction in terms of an a priori response tendency, the exact nature of the emotional reaction is determined by the combined outcome of the appraisal on several dimensions such as the pertinence of the consequences, the perceived causal agent, the estimated coping ability, and so forth. In the present study, the existence of justice climate at the team level is one of the important moderating dimensions. For example, with high group-level justice in a group, meaning consensus in group perception of fairness in the workplace, members share similar perceptions and normative expectations about how things should be administered or how people should interact with each other. High group-level justice can be developed by fair organizational procedures and policies and also reinforced by fair implementation of existing procedures. With high group-level justice, employees appraise unfair events as a violation of their norms and expectations, and thus are expected to experience more negative affective reactions, as compared to those in a group with low group-level justice.

Negative Affective Reactions

Different negative affective reactions are examined in the present study, including anger, irritation, anxiety and depression. Although they are all negative in terms of their hedonic tone, they, like other various negative emotions, differ in the level of arousal and the effect on subsequent behaviors, and thus need to be studied separately.

Anger and irritation. Anger and irritation are both high arousal and low pleasure and the most reported emotional reactions to injustice. In previous research, anger was experienced when people received unfair outcomes, especially when they were under-rewarded (Austin & Walster ,1974), and were influenced by information on biased procedural features (Cropanzano & Folger, 1989). In addition, anger is related to active behavioral responses such as engaging in revengeful or retaliatory behaviors (Bies & Tripp, 2001).

As explained in the previous section on the moderating role of group-level justice, it is hypothesized that people in high level of justice climates would feel more intense anger and irritation as immediate affective reactions when faced with an unfair event. Fairness theory (Folger & Cropanzano, 2001) posits that counterfactual thinking about alternative situations or options for a perpetrator can amplify the degree of anger. With high level of justice climate, individuals can expect a much fairer situation with regard to the distribution of outcomes, procedures or a perpetrator, and this stark contrast between an unfair event at hand and expectations will induce intensified anger and irritation as a result. Smith et al (1994) also argued that an objective injustice belief – that is a belief that is confirmed by the fact that most people would consider the

situation was unfair – would validate one's anger when facing an unfair event. With high level of justice climate, individuals can engage in sensemaking processes with other team members to validate their negative affective reactions, which will amplify anger and irritation.

Hypothesis 1a. Experience of unfair events will induce anger at the individual level.

Hypothesis 1b. Group-level justice will moderate the relationship between organizational mistreatment and anger. While experience of unfair events will induce anger, individuals under high group-level justice will feel more anger than those under low group-level justice.

Hypothesis 2a. Experience of unfair events will induce irritation at the individual level.

Hypothesis 2b. Group-level justice will moderate the relationship between organizational mistreatment and irritation. While experience of unfair events will induce irritation, individuals under high group-level justice will feel more irritated than those under low group-level justice.

Anxiety and depression. Both of these negative affective reactions have a strong association with individual and group level justice. Just processes and interactions could minimize individual feelings of both depression and anxiety (Greenberg, 2006), and injustice may increase the level of both negative affective reactions (Degoey, 2000). However, anxiety is low pleasure and high mental arousal, and depression is thought of as low levels of pleasure and arousal (Warr, 1996), resulting in differential relationships with other study variables that reflect the expected arousal and pleasure

dimensions (Warr, 1990). Tepper et al. (2006) found that depression partially mediated the relationship between procedural justice and perceptions of abusive supervision (Tepper, Duffy, Henle, & Lambert, 2006). Instead of having an intention to pursue revenge, people who felt depressed perceived the perpetrator as abusive to them. In the current study, compared to anger or irritation, anxiety and depression are thought to be the results of longer exposures to injustice and related to passive reactions.

Depression is indicated through gloom, despair, and a general lack of enthusiasm, and anxiety is accompanied by anxiousness, worry, and/or tension, with an inability to relax and feel comfortable (Spell & Arnold, 2007). With low levels of group-level justice, meaning consensus in group perception of unfairness in the workplace, people have been exposed to unfairness for a fair amount of time in their group. Therefore, rather than feeling anger and engaging in active restorative actions after experiencing an unfair event, people tend to feel more desperate and remain silent or cynical. In the current study, with low group-level justice, employees are expected to develop low expectations of fair procedures and treatments, and thus their frequent experiences of injustice are not expected to trigger such strong active negative affective reactions. Instead, those experiences will reinforce their feelings of depression and anxiety. On the other hand, in a group with high group-level justice, unfair events will be rare, and thus those experiences are believed to be correctible. It is hypothesized here that the level of depression or anxiety will be higher for those in low levels of justice climate than for those in high levels of justice climate due to the former's low expectations for fairness in their teams.

Hypothesis 3a. Experience of unfair events will induce anxiety at the individual level.

Hypothesis 3b. Group-level justice will moderate the relationship between organizational mistreatment and anxiety. While experience of unfair events will induce anxiety, individuals under low group-level justice will feel more anxious in general than those under high group-level justice.

Hypothesis 4a. Experience of unfair events will induce depression at the individual level.

Hypothesis 4b. Group-level justice will moderate the relationship between organizational mistreatment and depression. While experience of unfair events will induce depression, individuals under low group-level justice will feel more depressed in general than those under high group-level justice.

Emotions as Mediator between Justice Perception and Behaviors

In the cognitive processes leading to behavioral or attitudinal responses, emotions also play a role as mediators. Several researchers examined the mediating role of emotions in the relationship between perception of justice and behavioral outcomes. In affective event theory, affective reactions mediate event appraisal and behavioral reactions. Weiss & Cropanzano (1996) proposed that affect-driven behaviors follow directly from affective experiences and are influenced by processes such as coping or mood management, while judgment-driven behaviors are mediated by satisfaction with and consequences of decision-making processes. Justice events can be considered in both paths, and thus feelings arising from these events drive behavioral and attitudinal responses.

In examining the relationship between justice and emotions, most of the studies have focused on the mediating role of negative affect leading to undesirable behaviors. In several studies, negative emotions mediated the relationship between justice perceptions and various attitudinal and behavioral reactions including counterproductive work behaviors, compliance with organizational rules, and intention to leave or to take action against the perpetrator or the organization (Van Yperen et al, 2000; Rupp & Spencer, 2006; Gordijn et al., 2006). In a group context, De Crèmer (2006) found that disappointment led participants who are highly identified with their group to undertake revengeful action in reaction to unfair treatment. With regard to inter-group treatment, anger was found to mediate the relationship between the appraisal of the treatment and intention to take action against the perpetrator (Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006). In another study, group-based appraisal of injustice created group anger which promoted a tendency toward collective action against the organization (van Zomeren, Spears, Fischer, & Leach, 2004).

As noted previously, there will be stronger negative affective reactions under high group-level justice after individuals face mistreatment. Anger, the most representative outward-focused emotion, is mostly likely to be felt in such situations. Outward-focused negative emotions (i.e., anger and hostility) are associated with the desire for revenge, directing action against the perpetrator, punishing behavior, and retaliatory impulses (e.g., Allred, 1999; Averill, 1982; Weiner, 1985). Barclay et al. (2005) showed that outward-focused negative emotions mediated the relationship between fairness perceptions and retaliation. The experience of anger can be associated with attempts to clarify and resolve a source of disagreement or conflict

(Averill, 1982). Anger can signal a variety of messages, including dissatisfaction with an action, dissatisfaction with treatment, or a violation of justice (Tavris, 1982). Therefore, it is expected that anger motivates individuals to restore justice and deter future injustices (Bies & Tripp, 2002).

Several behavioral reactions to unfairness are examined in the current study, including intentions to leave the organization (turnover intention), intentions to revenge to specific targets (revenge), and intentions to use the formal conflict resolution procedures (e.g. grievance procedures). Negative affective reactions including anger, irritation, anxiety and depression are all expected to mediate the effects of fairness evaluation of the situation on behavioral intentions.

Hypothesis 5. Negative affective reactions will mediate the relationship between unfair treatment and individual behavioral reactions.

5a. Negative emotions will mediate the relationship between unfair treatment and intention to leave the organization (turnover).

5b. Negative emotions will mediate the relationship between unfair treatment and intention to take revengeful actions (revenge).

5c. Negative emotions will mediate the relationship between unfair treatment and intention to appeal (appeal).

In addition, fear of managerial reprisal after showing these behaviors is assumed to be low and the legitimacy of the complaint should be more clearly understood under high group-level justice than low group-level justice. Use of conflict resolution procedures also implies that employees using these procedures believe that the situations in question are correctible and that their voices can be heard. With low

group-level justice, there would be no such guarantee that procedural and interactional justice would be incorporated in the process. Therefore, it is expected that the levels of justice climate moderate the mediations of negative affective reactions. The more behavioral intentions to recover justice, mediated by negative emotions, will be found under high levels of justice climate.

Hypothesis 6. Group-level justice will moderate the mediation of emotions. The relationships proposed above will be stronger under high group-level justice.

Methods

Data and sample

Survey data were collected from work teams in Korean organizations across two rounds of surveys. A work team was defined as individuals working together with complementary skills and knowledge and reporting directly to the same supervisor (team leader). In addition, a work team is the smallest functional unit in the organization, working toward a common goal on a recurring basis. The author queried organizations regarding their groups' interest in participating before the survey was conducted. Because of this effort, most groups to which surveys were distributed returned completed surveys, yielding a response rate of 91% (80 out of 90 teams) for the first-round survey (Time 1) and 98% (73 out of 80) for the second-round survey (Time 2). The final sample consisted of 333 employees nested in 73 teams from 14 organizations.

A diverse range of organizations in Korea was sampled. Industries represented by the 14 organizations included retailing, manufacturing, finance, R&D, information technology, energy, and services. This diversity of industries was intentional to avoid

contextual influences specific to industry type. In the final sample of 73 work teams, team size ranged from 2 to 14, with an average size of 5 (SD = 1.79). Of the teams sampled, 27 teams had 5 members and 11 teams had 6 to 9 members. Thirty-five teams had 2 to 4 members, with one team consisting of 14 members. Sampling a limited number of employees within groups (e.g., 3 to 7) has been advanced as an acceptable measure in previous multilevel justice-related studies (e.g., Ambrose & Schminke, 2003; Schminke, Cropanzano, & Rupp, 2002). Among participants, 69% were men, and 97.2% had two-year college or higher degrees. Age of participants ranged from 20 to 50, with a mean age of 31 years. Regarding organizational tenure, 12% had been with the organization less than 1 year, 45% between 1 and 5 years, and 43% for more than 5 years. On team tenure, 25% of participants had been on their current team less than 1 year, 38% between 1 to 3 years, 20% between 4 to 6 years, and 17% more than 6 years. All of the respondents were full-time employees, and data were collected from team members in non-managerial positions.

Procedures

Interviews were conducted with a sample of participants to gather qualitative information about group atmosphere, organizational practices, and usual conflict resolution procedures. Based on these interviews as well as media reports on workplace conflicts, six fairness violation scenarios were constructed focusing on each facet of organizational justice. After a pilot study in which the scenarios were evaluated, three scenarios representing distributive justice violation, procedural justice violation, and interactional justice violation were selected and included in the second-round survey.

With regard to participating organizations, one representative (most of them were HR managers) of each organization was informed orally of the general nature of the study and asked to inquire about team members' interest in the survey to ensure voluntary participation. A package for each work team contained one supervisor survey and five team member surveys, with extra surveys in case teams exceeded five members. Each survey was distributed in an envelope that was also used for a return. The representative in each organization collected completed and sealed surveys from each team. Each questionnaire had a cover letter that explained the nature of the research and assured anonymity and confidentiality to participants. Contact information for the researcher was also included in the cover letter. The representative distributed surveys to team members within the groups in each organization. On completion, most of the respondents sealed their surveys in the envelopes provided and returned them through the representative. The representatives then handed the completed surveys from each team to the author.

Surveys were conducted two times with a 2-week interval. The second-round survey was distributed in the same way as explained above, two weeks after the completion of the first-round survey. The Time 1 survey contained items measuring individual-level trait affectivity and group-level justice climate. The Time 2 survey items included fairness evaluation of the scenarios as well as affective and behavioral responses to them.

Measures

Individual-level variables and team-level variables were measured over the two rounds of surveys. Individual-level variables included trait affectivity, affective and

behavioral responses to the scenarios. Team-level variables included procedural, distributive, informational and interpersonal justice climate. The Time 1 survey included individual trait affectivity and justice climate measures. The Time 2 survey included the other individual-level variables including fairness evaluation of the scenarios, affective and behavioral responses to them. Independent variables and dependent variables were measured at different time points to minimize common source bias. Descriptive statistics including means, standard deviations, and correlations are also presented in Table 1.

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Insert Table 1 about here

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Trait affectivity. Individual trait affectivity was measured using a 20-item scale, the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) in the Time 1 survey. Participants responded to the statement "Please indicate to what extent you have felt this way during the past week" on a 5-point Likert scale ranging from very slightly or not at all (1) to extremely (5). Each scale for positive affectivity (PA) and negative affectivity (NA) was constructed by averaging responses to ten adjectives describing positive and negative affectivity. Scale reliability (Cronbach's coefficient α) was 0.94 and 0.91 for positive affectivity (PA) and negative affectivity (NA) respectively.

Group-level justice. Group-level justice measures based on the four-factor model by Colquitt (2001) were used to analyze organizational justice in the Time 1 survey (Colquitt, 2001). Following the reference-shift consensus composition model (Chan,

1998), individuals rated team-level justice – procedural, distributive, informational and interpersonal justice climate with reference to their team (e.g., in your team, a member of my team, the boss of my team, the procedure in my team).

Individuals read the following statements: "The following items refer to the procedures used to arrive at your outcomes in your team. To what extent have you been able to express your views and feelings during those procedures in your team [procedural justice climate]?" "The following items refer to your outcome in your team. To what extent does your outcome reflect the effort you have put into your work in your team [distributional justice climate]?" "The following items refer to your team leader. To what extent has he/she treated you in a polite manner [interpersonal justice climate]?" "The following items refer to your team leader. To what extent has he/she explained the procedures thoroughly [informational justice climate]?" All items used a 5-point Likert scale ranging from (1) to a small extent to (5) to a large extent.

Individual scores were aggregated to the team level. In order to construct the level-2 variables, individual responses to procedural justice climate, distributive justice climate, informational justice climate, and interpersonal justice climate were aggregated to the team level. For construct validity, within-group agreement in members' perceptual ratings was examined by intra-class correlations (ICC (1) and ICC (2)) for each team-level variable. ICC (1) refers to intra-class correlations among members of the same team, showing similarity in patterns of ratings made by different raters. ICC (1) values for team level justice climate ranged from 0.17 to 0.21, showing that at least 17% to 21% of the variance in ratings of justice climate is explained by team membership. On the other hand, ICC (2) shows the degree of reliability of team-

level scores, that is, averaged scores for each team for respective variables. ICC (2) values were calculated and ranged from 0.51 to 0.56, with the average number of team members per group (k = 4.7). For additional support for aggregation of individual responses to the team level, inter-rater agreement, $r_{wg(j)}$ (James, Demaree, & Wolf, 1984), was examined for each team by comparing observed group variance to an expected random variance. The uniform distribution was chosen for comparison, and the averaged $r_{wg(j)}$ for each team-level variable varied from 0.71 to 0.76.

***Responses to scenarios*.** Three scenarios, one each representing distributive justice violation, procedural justice violation, and interactional justice violation, were presented to the participants in random order in the beginning of the Time 2 survey. The first scenario described a situation where performance evaluation was unreflective of the person's own effort and achievement (distributive justice violation). The second scenario included a situation where an employee received a unilateral notice of the elimination of incentives without any discussion with employees and with a lack of voice in the decision-making process (procedural justice violation). The last scenario described inappropriate behavior of a supervisor, who often yells at employees or is inconsistent and does not consider people's opinion in making decisions (interactional justice violation). The contents of these scenarios, based on the interviews and media coverage described in the beginning of this section, thus reflect the reality of workplace events. Participants read the scenarios and answered the questions on the fairness of each scenario and their affective reactions.

Fairness evaluation. Participants evaluated the fairness of the scenarios by rating them on a 5-point Likert scale from very unfair (1) to very fair (5). The mean rating of

fairness was 2.29 (*SD* = 0.8) for the distributive fairness violation scenario, 2.29 (*SD* = 0.8) for the procedural fairness violation scenario, and 1.83 (*SD* = 0.79) for interactional fairness violation scenario.

Affective responses to the scenarios. For affective reactions to the fairness violation scenarios, previously validated emotion measurements for anger, irritation, anxiety, and depression were included in the Time 2 survey. Participants responded to the question "How would you feel if you were in the position of XX (person in the scenario)?" on a 5-point Likert scale ranging from very slightly or not at all (1) to extremely (5). Anger and irritation were measured with a single adjective (e.g., angry, irritated). Anxiety and depression were measured using the scale from Axtell et al. (2002). As a shortened version of Warr's (1990) Anxiety-Contentment and Depression-Enthusiasm Scales, the scales contained six adjectives each, and responses were averaged to construct an anxiety scale and a depression scale. For each scale, three of the items were reverse-coded so that a higher number indicated depression or anxiety. The internal consistency of the anxiety scale (Cronbach's coefficient α) was 0.71, and that of the depression scale was 0.8.

Behavioral reactions to the scenarios. For behavioral intentions after reading the fairness violation scenarios, participants' answers reflected the degree of engaging in seven behavioral options on a 5-point Likert scale (from never (1) to actively pursue (5)). Behavioral reactions included considering leaving the organization (turnover), using a conflict management system in their organization (appeal), and taking a revengeful action toward the one responsible (revenge).

Control variables. Demographic information including sex (male = 1, female = 0), age, organizational tenure (in months), team tenure (in months), title, and team characteristics including team size and function, and industry were included in both surveys.

Results

Preliminary analyses

Table 1 includes descriptive statistics and correlations among variables in the model. Although included in the preliminary analyses, non-significant control variables were dropped from the model except for sex at the individual level and team size at the team level, after model comparisons by comparing deviance statistics. Due to the high negative correlation between positive and negative affectivity ($\alpha = -0.058$, $p < .05$) only negative affectivity was included in testing the hypotheses. Due to some missing data points at the individual level, the hypothesized models were analyzed with five imputed data sets constructed from multiple imputation methods.

Hierarchical linear modeling (HLM 7.0; Raudenbush, Bryk, & Congdon, 2010) was used to test the hypothesized cross-level moderating effects. At Level 1, individual-level outcome variables such as negative emotional reactions to the scenarios were regressed on fairness evaluations of the scenarios and negative affectivity controlling for sex. At Level 2, the pooled values of the Level 1 parameters were used as dependent variables that are predicted by the four facets of justice climate, controlling for team size. Level 2 variables were grand-centered for the interpretation of the effects. To assess the cross-level effects of between-team level variables, a precondition of significant variance in the Level 1 slopes needs to be

supported (Hofmann, 1997). Among the negative affective reactions to the scenarios, only reactions to the procedural fairness violation scenarios yielded significant variance in the Level 1 slopes. Anger, irritation, and depression in response to the procedural fairness violation scenario (Anger_2, Irritation_2, Depression_2) showed significant variance in the Level 1 slopes in the null model; therefore, these outcome variables were modeled (see Table 2). Hypotheses 3a and 3b on the moderating role of justice climate on the relationship between fairness evaluations and anxiety reactions could not be tested due to non-significant variance in the Level 1 slopes for the anxiety dependent variable.

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Insert Table 2 about here

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Tests of main effects of fairness evaluations on negative affective reactions

Controlling for individual negative affectivity and sex, Hypotheses 1a, 2a, and 4a predicted the main effect of fairness evaluations of each scenario on negative affective reactions. To test this, individuals' negative affective reactions to the scenarios including anger, irritation, and depression were regressed on their respective fairness ratings of the scenario, controlling for sex at Level 1. At Level 2, justice climate variables and team size were modeled to have effects on the Level 1 intercept only. In this intercept-as-outcome model, the main effects of variables were analyzed (see Table 3). Results indicated that negative affectivity, fairness evaluation and sex had main effects on the negative emotional reactions. As the fairness evaluation of the scenario had a significant negative relationship with anger ($t(72) = -9.42$), irritation

(t(72) = -6.82) and depression (t(72) = -7.24), Hypotheses 1a, 2a and 4a were supported at p = .001 level.

Most of the level 2 justice climate variables did not show significant main effects. Although not hypothesized, after controlling for the effect of team size, sex and negative affectivity, only interpersonal justice climate showed significant main effects on depression (γ_{03} = 0.28, *SE* = 0.11), t(67) = 2.54, p < .05.

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Insert Table 3 about here

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Tests of the cross-level moderating role of justice climate

Hypotheses 1b, 2b, and 4b predicted a moderating role of justice climate on the relationship between the fairness evaluation and negative affective reactions. Using a slope-as-outcomes model, the moderating role of the justice climate variable was analyzed. Level 2 variables including justice climate and team size were modeled to have effects on Level 1 intercept and slopes for different negative affective reactions including anger, irritation and depression. As shown in Table 4, the four facets of justice climate and the team size control variable were modeled to interact with both negative affectivity and fairness evaluations while allowing the Level 1 control variable sex to have random effects.

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Insert Table 4 about here

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As expected, justice climate showed a significant moderating influence on the relationship between the fairness evaluation of the scenario and negative affective reactions. Specifically, procedural justice climate moderated the relationship between the fairness evaluation of the procedural fairness violation scenario and anger (γ_{22} = -0.42, *SE* = 0.21), t(67) = -2.02, p < .05 ; thus, Hypothesis 1b is supported. Using two variance components from the intercept-as-outcome model and the slope-as-outcome model in the Level 1 slope relating the fairness evaluation to anger, the pseudo-R^2 for procedural justice climate was 0.59 (i.e., $[\tau_{11b}- \tau_{11M}]/ \tau_{11b}$, [0.0136-0.0056]/0.0136 = 0.59). This significant interaction is shown in Figure 2.

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Insert Figure 2 about here

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In support of Hypothesis 2b, procedural justice climate moderated the relationship between the fairness evaluation of the procedural fairness violation scenario and irritation (γ_{22} = -0.55, *SE* = 0.27), t(67) = -2.02, p < .05. Using two variance components from the intercept-as-outcome model and the slope-as-outcome model in the Level 1 slope relating the fairness evaluation to anger, the pseudo-R^2 for procedural justice climate was 0.82 (i.e., $[\tau_{11b}- \tau_{11M}]/ \tau_{11b}$, [0.0154-0.0027]/0.0154 = 0.82). This significant interaction is shown in Figure 2.

For the dependent variable of depression, distributive justice climate moderated the relationship between the fairness evaluation of the procedural fairness violation scenario and anger (γ_{24} = 0.3, *SE* = 0.14), t(67) = 2.19, p < .05; thus, Hypothesis 4b is also supported. Using two variance components from the intercept-as-outcome model

and the slope-as-outcome model in the Level 1 slope relating the fairness evaluation to anger, the pseudo-R^2 for procedural justice climate was 0.84 (i.e., $[\tau_{11b}- \tau_{11M}]/ \tau_{11b}$, [0.0104-0.0017]/0.0104 = 0.84). This significant interaction is shown in Figure 3.

Consistent with predictions, Figure 2 demonstrates that at high levels of procedural justice climate, the negative relationship between the fairness evaluation and anger was stronger than it was at low levels of procedural justice climate. Procedural justice climate was negatively related to the fairness evaluation-anger slope, showing people with high levels of procedural justice climate showed more anger than those with low levels of procedural justice climate when they evaluated the event as unfair.

By the same token, Figure 3 demonstrates that at high levels of procedural justice climate, the negative relationship between the fairness evaluation and irritation was stronger than it was at low levels of procedural justice climate. Procedural justice climate was negatively related to the fairness evaluation-irritation slope, showing that people with high levels of procedural justice climate showed more irritation than those with low levels of procedural justice climate when they evaluated the event as unfair.

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Insert Figure 3 about here

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Figure 4 demonstrates that at low levels of distributive justice climate, the negative relationship between the fairness evaluation and depression was stronger than it was at high levels of distributive justice climate. Distributive justice climate was positively related to the fairness evaluation- depression slope, showing that people

with low levels of distributive justice climate showed more depression than those with high levels of distributive justice climate when they evaluated the event as unfair.

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Insert Figure 4 about here

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Mediation analysis

Hypotheses 5a, 5b and 5c predicted a mediating role of negative affective reactions to the scenarios in the relationship between the fairness evaluation and behavioral reactions. As can be seen in Table 5, the fairness evaluation significantly predicted both negative affective reactions and behavioral reactions.

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Insert Table 5 about here

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Further, negative affective reactions significantly predicted behavioral reactions except for revenge. In the case of taking a revengeful action toward the one responsible for unfair events, the significant relationships between negative affective reactions and behavioral reactions were not confirmed, and thus were excluded from the mediation analysis. Therefore, Hypothesis 5b could not be tested with the data.

To test for Hypotheses 5a and 5c, Baron and Kenny's (1986) approach was applied. The effects of the fairness evaluation on behavioral reactions with and without controlling for negative affective reactions were compared. As can be seen in Table 5, when negative affective reactions were controlled, the effect of the fairness evaluation on behavioral reactions was reduced. In the case of turnover intention,

negative affective reactions partially mediated the effect of fairness on turnover. All four negative emotional reactions (anger, irritation, anxiety, and depression) reduced the effect of fairness, but the direct effect of the fairness evaluation was still statistically significant. In support of Hypothesis 5a, this indicates that negative affective reactions partially mediated the effects of the fairness evaluation.

In the case of using a conflict management system (appeal), negative affective reactions fully mediated the effect of the fairness evaluation of the procedural fairness violation scenario (scenario 2). In the case of the distributive and interactional fairness violation scenarios (scenarios 1 and 3), anger and anxiety fully mediated the effect of fairness on using a conflict management system (appeal), while irritation and depression did not show a significant mediating effect. Thus, Hypothesis 5c is partially supported. As depicted in Table 5, the Sobel test (Sobel, 1982) was significant for all mediation effects except the effect of irritation and depression on appeals for the distributive and interactional fairness violation scenarios.

Test of moderated mediation by justice climate

All significant mediation paths were tested for the conditional indirect effects for specific values of moderator, procedural justice climate (PJC). Moderated mediation tests were executed using MODMED macro for SPSS (Preacher, Rucker & Hayes, 2007).

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Insert Table 6 about here

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As shown in Table 6, all significant mediations found earlier were moderated by procedural justice climate (PJC), showing significant conditional indirect effects on behavioral intentions. As depicted in Figure 1, the current model assumes that mediation paths through negative emotions to behavioral intention are moderated by the interaction term between the fairness evaluation and the justice climate. Therefore, the conditional indirect effects were tested for three specific values of moderator, including the sample mean (3.91), -1 standard deviation (3.4), and +1 standard deviation (4.4). Consistent with the Hypothesis 6, the mediations of anger in the relationship between the impact of procedural and interactional fairness evaluation (Fair_2 and Fair_3) and behavioral intentions (Turnover, Appeal) were moderated by PJC. Individuals were more willing to leave the organization and to use grievance procedures under high levels of justice climate, and these relationships were mediated by anger. In the case of procedural fairness evaluation (scenario 2), the mediations of depression were also moderated by procedural justice climate, such that people showed more intention to turnover or appeal under high levels of justice.

Discussion

The present research tried to explain the role of group-level justice in individuals' affective reactions and found moderating effects on the relationship between affective and behavioral responses to unfair events. In particular, different types of negative reactions were modeled by four different facets of justice climate variables. Regarding facets of justice perception (i.e., procedural, interactional, and distributive justice), group-level justice may emphasize certain types of justice over others. It is possible that some groups have group-level justice focusing more on

distributive justice (i.e., equity norms), while other groups have group-level justice emphasizing fair procedures (i.e., the non-discriminatory nature of organizational policy), and other groups may have more salient norms for interactional justice. Individual employees may have stronger affective and behavioral reactions to violations of the type of justice that has been emphasized in their workplace. For example, if work group members have strong group justice focusing more on interactional justice, they may be more concerned about the misconduct of persons than about unfair procedures or outcomes. Previous findings on the interactions between the types of justice can be also applied in studies of the role of group-level justice, thus expanding the research literature on group-level justice constructs.

In the current study, a comprehensive comparison of differential moderating role of each facet of justice climate could not be implemented due to the fact that variances of Level 1 slopes of affective reactions for the two other types of fairness violation scenarios (distributive and interactional) were not significant. However, the results suggested that the procedural justice climate facet had a moderating role for the fairness evaluation of procedural fairness violation, showing some directions for future research. From the depression model, distributive justice climate, not procedural justice climate, showed moderating effects on the fairness-depression slope. In drawing Hypothesis 4b, it was argued that the repeated experience of unfairness was the reason that individuals with low level justice climate would feel depression rather than anger or irritation. It may be possible that some features of low level distributive justice climate reflect more salient characteristics of the group-level justice compared to other facets of justice climate. In fact, distributive justice climate showed a

marginally significant moderating effect on the fairness-anger slope (γ_{24} = 0.33, *SE* = 0.19), t(67) = 1.72, p = .089, and on the fairness-irritation slope as well (γ_{24} = 0.37, *SE* = 0.22), t(67) = 1.74, p = 0.087.

Although the current study did not test it directly, many researchers suggested a central motivational role for emotion (Mikula et al., 1998) in reactions directed at restoring equity (Hassebrauck, 1987). Emotional reactions to perceived injustice can lead to certain behavioral reactions. Research indicates that negative emotions are related to both organizational and person-targeted counterproductive work behavior (Fox et al. 2001). While perceived unfairness is considered to be an important situational factor that induces negative emotions, behavioral reactions caused by negative emotions, which may be adaptive reactions to negative stimuli at the individual level, may be considered socially dysfunctional in a social setting (Folger & Skarlicki, 1998). Therefore, negative emotions induced by perceived injustice can be funneled into counterproductive work behavior such as theft, withdrawal, or aggression. By having fair processes, however, dissatisfaction over poor distributive outcomes (Greenberg, 1990) can be minimized and organizational citizenship behavior can improve as well (Organ & Ryan, 1995). Future research should examine this mediation of negative emotions with consideration of the cross-level moderating effects of justice climate.

The influence of negative affective reactions in the workplace can be very complex. When negative emotions are strongly felt by employees (Miner, Glomb, & Hulin, 2005), the dysfunctional effect of individual negative affective reactions can be substantial. Negative emotions may harm organizational cultures (Aquino, Douglas, &

Martinko, 2004), or lead to aggression or violence (Fox & Spector, 1999). In this paper, individual negative emotions elicited by a trigger event are assumed to signal organizational unfairness and injustice and the degree of group-level justice norms. Managers can understand this effect of employees' negative emotions as beneficial, since it draws attention to problematic features of the organization, thus providing direction for correction, especially regarding organizational conflict resolution procedures.

Incorporating the effect of group-level justice on individuals' affective responses into the affective events model will yield insights regarding how, why, and under what conditions people have different affective reactions and derive fairness judgments accordingly, and how organizations may create and foster positive perceptions of group-level justice by assuring organizational justice. The main strength of this study is its multilevel research design. The complex nature of contextual variables such as the impact of justice climate on team members' emotional reactions to unfair events was captured by modeling cross-level moderation. A second strength was the measuring of independent and dependent variables at different points in time. This made it possible to minimize same source bias while responses from individuals were used for constructing individual- as well as team-level variables. Third, the use of scenarios for different types of fairness violations allowed for the separate investigation of the impact of each facet of justice climate. The focus on each facet of justice violation in each scenario made it possible to capture the differential moderating effects of justice climate.

This study has potential limitations as well. First, it is important to recognize limits to generalizability. Although constructed based on interviews and media coverage, the nature of the event described in each scenario can convey different meanings to individuals in other types of industries or job types, which this study did not consider. Second, the focus of this study was team-level justice climate, not exactly reflecting organizational-level features. Thus, it is also plausible that each organization may have distinct features (e.g., a fair and transparent conflict resolution system in place or a good governance system) that might influence the overall level of justice climate of the organization. Moreover, low ICC (2) values for justice climate ranging from 0.51 to 0.56 suggested that the sampled teams were similar to each other in their levels of justice climate. It is suggested that ICC (2) values over .60 are desirable (Glick, 1985). This may be attributed to the fact that the unit of analysis in the current study is teams, not organizations. Several teams from the same organization sharing similar levels of climate may be the reason for low ICC (2) values.

Despite these limitations, this study contributes to the research on emotions and justice by showing the moderating role of justice climate on emotional reactions at the individual level. The results suggest that among the many contextual variables affecting individuals' cognition and emotions, group-level justice constructs provide individuals with a reference point for evaluating certain events, thus leading to different types and degrees of emotional reactions. In order to understand the nature of emotions in organizations, future research on emotions and justice should incorporate this type of multilevel analysis.

APPENDICES

Table 1. Descriptive Statistics and Correlations [a]

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender [b]	0.71	0.46	-----											
2. Positive Affectivity	3.29	0.71	0.01	-----										
3. Negative Affectivity	2.39	0.78	-0.08	-0.58**	-----									
4. Fairness Evaluation (Scenario 2)	2.29	0.8	-0.08	0.17**	0.07	-----								
5. Anger (Scenario 2)	3.52	1.16	0.04	-0.25**	0.14*	-0.45**	-----							
6. Irritation (Scenario 2)	3.57	1.19	0.07	-0.24**	0.17**	-0.36**	0.86**	-----						
7. Anxiety (Scenario 2)	3.58	0.65	0.01	-0.15**	0.16**	-0.23**	0.54**	0.53**	-----					
8. Depression (Scenario 2)	3.75	0.74	0.03	-0.27**	0.15	-0.4	0.77**	0.75**	-0.66**	-----				
9. Distributive Justice Climate	3.2	0.52	-0.07	0.38**	-0.25**	0.22**	-0.14**	-0.1**	-0.08**	-0.18**	-----			
10. Procedural Justice Climate	3.92	0.52	-0.09	0.35**	-0.26	0.15	-0.11**	-0.13	-0.01*	-0.12**	0.68**	-----		
11. Interpersonal Justice Climate	4.21	0.52	-0.05	0.3**	-0.24*	0.01**	0.02	0.02**	0.06**	0.02**	0.57*	0.75**	-----	
12. Informational Justice Climate	3.65	0.49	-0.05	0.42**	-0.29**	0.16**	-0.08**	-0.08**	-0.08	-0.14**	0.66	0.72**	0.7**	------

[a] This table shows means, standard deviations, and correlations with variables in the model. N=333 individuals.
[b] Sex Male = 1, Female = 0.
*p < .05 **p < .01
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Table 2. Hierarchical Linear Modeling Estimates of Null Models

Dependent Variable	γ_{00}	σ^2	τ_{00}	Intraclass correlations
Anger _2	3.57	1.27	0.13**	0.09
Irritation _2	3.57	1.34	0.12**	0.13
Depression_2	3.75	0.51	0.04*	0.08
Anxiety_2	3.59	0.41	0.02	0.05

Note. N = 333. γ_{00} = pooled intercept; σ^2 = within-team variance; τ_{00} = between-team variance; Intra-class correlations ICC = $\tau_{00}/(\sigma^2 + \tau_{00})$. Level 1 slope variance for anxiety_2 was not significant at p = .05.
*p < .05 **p < .001

Table 3. Hierarchical Linear Modeling Results for the Main Effects of Justice Climate [a]

	Dependent Variable								
	Anger_2			Irritation_2			Depression_2		
Variables	Coefficient (γ_{ij})	t	df	Coefficient (γ_{ij})	t	Df	Coefficient (γ_{ij})	t	df
Level 1									
Negative Affectivity γ_{10}	0.29	3.67**	72	0.33	3.62**	72	0.16	3.15*	72
Fairness evaluation_2 γ_{20}	-0.68	-9.42**	72	-0.56	-6.82**	72	-0.36	-7.24**	72
Sex γ_{30}	-0.05	-0.43	72	-0.13	-0.97	72	-0.02	-0.21	72
Level 2									
Intercept γ_{00}	4.39	15.98**	67	4.14	13.34**	67	4.21	23.33**	67
Team size γ_{01}	0.01	0.26	67	0.01	0.32	67	0.00	0.05	67
Procedural justice climate γ_{02}	-0.26	-1.11	67	-0.26	-1.15	67	-0.13	-0.94	67
Interpersonal justice climate γ_{03}	0.28	1.67	67	0.3	1.43	67	0.28	2.54*	67
Distributive justice climate γ_{04}	-0.04	-0.2	67	0.00	-0.01	67	-0.06	-0.47	67
Informational justice climate γ_{05}	0.14	0.86	67	0.1	0.45	67	-0.09	-0.9	67

[a] This table shows results of an intercept-as-outcomes analysis. Level 1, n = 333 individuals; Level 2, n = 73 teams. Level 2 variables were centered by the grand mean. The t-tests associated with the γ_{00} -γ_{05} parameters show the relationship between each justice climate dimension and negative emotional reactions anger, irritation, and depression to the procedural justice violation scenario.
*p < .05 **p < .001

Table 4. Results of Analyses of the Moderating Effects of Justice Climate [a]

	Relationship of Fairness to negative emotions(DVs)					
	Anger_2		**Irritation_2**		**Depression_2**	
Variables	**Coefficient (γ_{ij})**	**t df(67)**	**Coefficient (γ_{ij})**	**t df(67)**	**Coefficient (γ_{ij})**	**t df(67)**
Level 2						
Intercept γ_{20}	-0.67	-10.17**	-0.53	-7.65**	-0.34	-7.36**
Team size γ_{21}	-0.02	-0.59	-0.04	-1.19	-0.03	-1.42
Procedural justice climate γ_{22}	**-0.42**	**-2.02***	**-0.55**	**-2.02***	-0.23	-1.38
Interpersonal justice climate γ_{23}	-0.24	-1.11	-0.13	-0.57	-0.11	-0.67
Distributive justice climate γ_{24}	0.33	1.72	0.38	1.74	**0.3**	**2.19***
Informational justice climate γ_{25}	0.39	1.6	0.39	1.5	0.1	0.54

[a] This table show results of a slope-as-outcome analysis. Level 1, n = 333 individuals; Level 2, n = 73 teams. Level 2 variables were centered by the grand mean. These three models regress the fairness evaluation-negative emotions (anger, irritation, depression to the procedural fairness violation scenario) slopes on justice climate, controlling for team size and sex. The t-tests associated with the γ_{22} –γ_{25} parameters show the relationship between each justice climate dimension and fairness-negative emotional reactions slopes, testing the cross-level moderating effects of justice climate.
*p < .05 **p < .001

Table 5. Analysis of Mediation role of Negative Affective Reactions [a]

	Effects on Behavioral reactions (c)[a]				Effects on negative affective reactions (a) [a]				Direct Effects on behavioral reactions when controlled for negative affective reactions (direct effect) (c') [a]			Sobel test for indirect effect (ab) [b]
Variable	Behavioral reactions	B	SE	t	Affective reactions	B	SE	t	B	SE	t	**z**
Fairness 1	Turnover	-0.41	0.07	-5.88**	Anger	-0.58	0.07	-8.05**	-0.27	0.08	-3.59**	**-4.08****
					Irritation	-0.52	0.07	-7.17**	-0.25	0.07	-3.42*	**-4.16****
					Anxiety	-0.25	0.04	-5.68**	-0.31	0.07	-4.24**	**-3.91****
					Depression	-0.43	0.05	-8.46**	-0.31	0.08	-3.97**	**-3.19****
	Appeal	-0.17	0.07	-2.41**	Anger				-0.1	0.08	-1.27	**-2.17***
					Irritation				-0.11	0.08	-1.47	NS
					Anxiety				-0.11	0.08	-1.47	**-2.34***
					Depression				-0.13	0.08	-1.6	NS
Fairness 2	Turnover	-0.53	0.08	-7.14**	Anger	-0.64	0.07	-8.99**	-0.33	0.08	-4.09**	**-4.4****
					Irritation	-0.53	0.08	-6.85**	-0.35	0.08	-4.57**	**-4.54****
					Anxiety	-0.18	0.04	-4.12**	-0.45	0.08	-5.9**	**-2.77***
					Depression	-0.37	0.05	-7.84**	-0.37	0.08	-4.56**	**-3.94****
	Appeal	-0.16	0.08	-2.19*	Anger				-0.01	0.08	-0.15	**-3.29****
					Irritation				-0.03	0.08	-0.37	**-3.39****

					Anxiety				-0.08	0.08	-1.07	**-3.29****
					Depression				-0.06	0.08	-0.67	**-2.47***
Fairness 3	Turnover	-0.43	0.08	-5.67**	Anger	-0.44	0.07	-5.96**	-0.29	0.08	-3.69**	**-3.9****
					Irritation	-0.44	0.07	-5.88**	-0.32	0.08	-3.93**	**-3.38****
					Anxiety	-0.28	0.04	-6.37**	-0.3	0.08	-3.71**	**-3.6****
					Depression	-0.27	0.05	-5.9**	-0.34	0.08	-4.1**	**-2.91***
	Appeal	-0.23	0.09	-2.69*	Anger				-0.12	0.09	-1.32	**-3.28****
					Irritation				-0.17	0.09	-1.9	NS
					Anxiety				-0.13	0.09	-1.41	**-2.95***
					Depression				-0.17	0.09	-1.89	NS

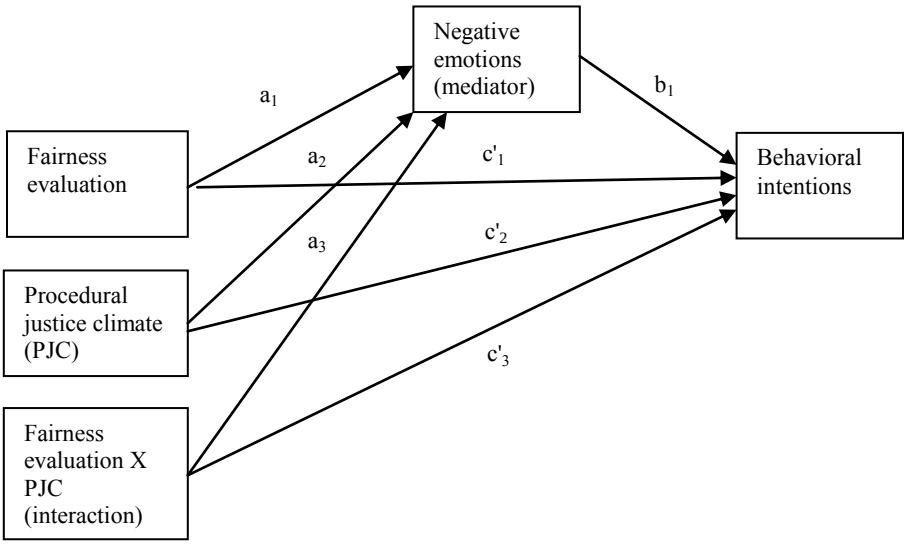
[a] In Baron & Kenny (1986), significant coefficient between independent variable and dependent variable (c), significant coefficient between independent variable and mediator (a), and non-significant coefficient between independent variable and dependent variable controlling for mediator (c') mean full mediation mechanism. If c' is significant even after controlling for mediator, partial mediation is assumed. [b] Sobel test (Sobel, 1982) directly tests the significance of indirect effect (ab). *p < .05 **p < .001

Table 6. Analyses of Moderated Mediation by Procedural Justice Climate - Test of conditional indirect effects

IV	DV	Mediator	Moderator: Procedural Justice Climate (Moderator values are the sample mean and +/- 1 SD)		
			PJC = 3.4	PJC = 3.92	PJC = 4.44
Fairness 1	Turnover	Anger	-0.153**(0.04)	-0.149**(0.04)	-0.145**(0.04)
		Irritation	-0.155**(0.04)	-0.135**(0.03)	-0.116**(0.04)
		Anxiety	-0.122** (0.04)	-0.111**(0.03)	-0.101**(0.03)
		Depression	-0.089**(0.03)	-0.092**(0.03)	-0.095**(0.04)
	Appeal	Anger	-0.079*(0.04)	-0.077*(0.03)	-0.075*(0.03)
		Irritation	-0.071*(0.04)	-0.062*(0.03)	-0.053(0.03)
		Anxiety	-0.061*(0.03)	-0.056*(0.02)	-0.05 *(0.02)
		Depression	-0.038(0.03)	-0.039(0.03)	-0.041(0.03)
Fairness 2	Turnover	Anger	-0.168**(0.04)	-0.182**(0.04)	-0.195**(0.05)
		Irritation	-0.139**(0.04)	-0.159**(0.04)	-0.179**(0.05)
		Anxiety	-0.066*(0.03)	-0.061**(0.02)	-0.058*(0.03)
		Depression	-0.123**(0.04)	-0.131**(0.04)	-0.139**(0.04)
	Appeal	Anger	-0.118**(0.04)	-0.128**(0.04)	-0.138**(0.04)
		Irritation	-0.088**(0.03)	-0.1**(0.03)	-0.113**(0.04)
		Anxiety	-0.056*(0.03)	-0.052*(0.02)	-0.049*(0.03)

		Depression	-0.065*(0.03)	-0.07*(0.03)	-0.074* (0.04)
Fairness 3	Turnover	Anger	-0.12**(0.04)	-0.123**(0.03)	-0.125**(0.04)
		Irritation	-0.118**(0.04)	-0.095**(0.03)	-0.072*(0.03)
		Anxiety	-0.128**(0.04)	-0.115*(0.03)	-0.102**(0.03)
		Depression	-0.104**(0.04)	-0.085**(0.03)	-0.067*(0.03)
	Appeal	Anger	-0.105**(0.04)	-0.107**(0.03)	-0.109**(0.04)
		Irritation	-0.063(0.04)	-0.05(0.03)	-0.038(0.03)
		Anxiety	-0.097*(0.04)	-0.087*(0.03)	-0.077*(0.02)
		Depression	-0.06(0.04)	-0.049(0.03)	-0.039(0.03)

Note. These point estimates of conditional indirect effects of fairness evaluation on behavioral intention are $f(\hat{\theta}|PJC) = \widehat{b_1}\ (\hat{a}_1 + \hat{a}_3\ PJC)$ from Figure 1, with PJC being a moderator and negative emotions as a mediator (Preacher, Rucker & Hayes, 2007). *p < .05, **p < .001



Note. The point estimate of conditional indirect effect of fairness evaluation on behavioral intention is $f(\hat{\theta}|PJC) = \widehat{b_1}\ (\hat{a}_1 + \hat{a}_3\ PJC)$ with PJC being a moderator and negative emotions as a mediator (Preacher, Rucker & Hayes, 2007).

Figure 1. Moderated mediation model

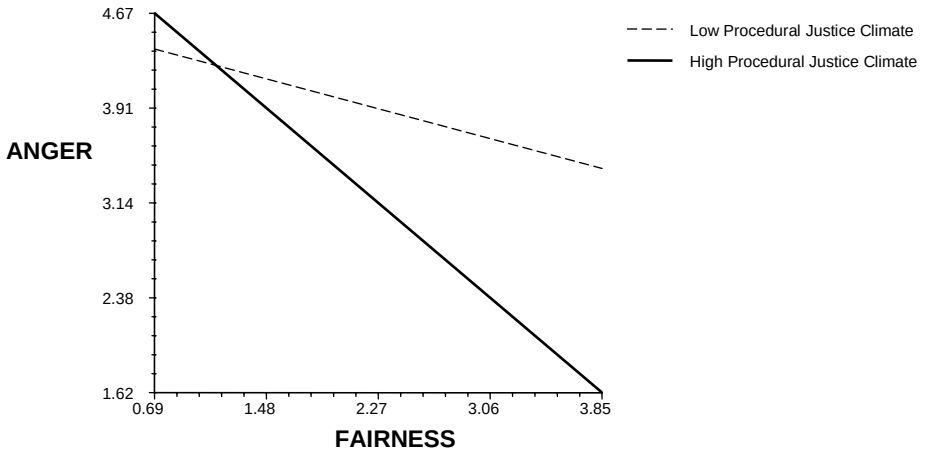


Figure 2. Moderating effect of procedural justice climate on the relationship between fairness evaluation and anger

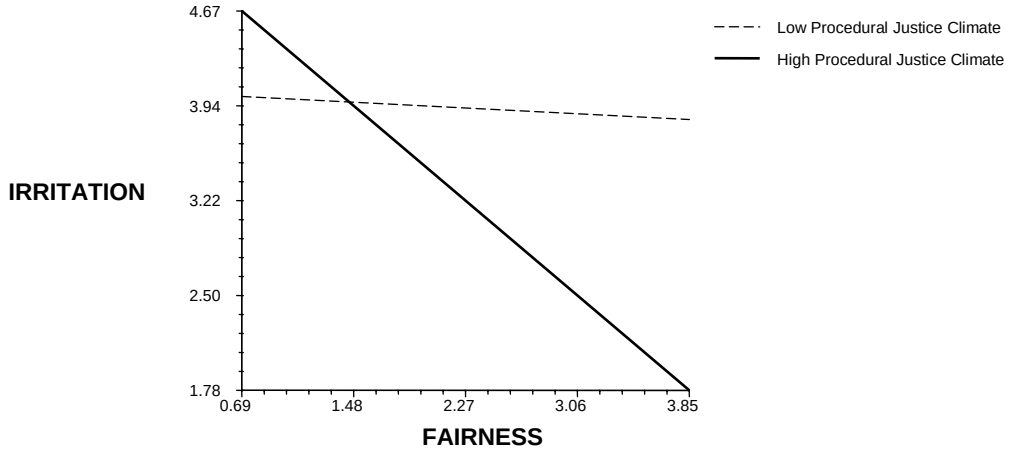


Figure 3. Moderating effect of procedural justice climate on the relationship between fairness evaluation and irritation

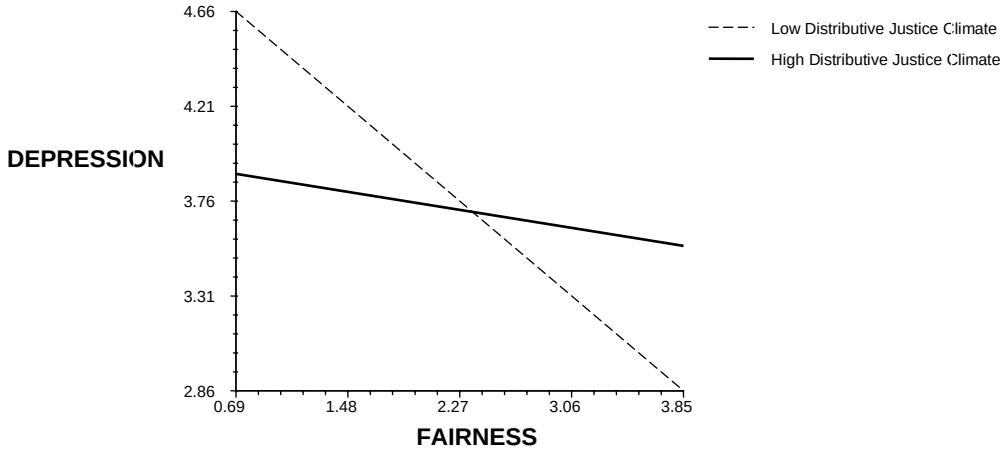


Figure 4. Moderating effect of distributive justice climate on the relationship between fairness evaluation and depression

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CHAPTER 4

THE MODERATING ROLE OF JUSTICE CLIMATE IN THE RELATIONSHIP BETWEEN LOCUS OF CONTROL AND ORGANIZATIONAL CYNICISM

Individual traits and situational factors can be two sources of certain attitudes towards organizations. As a prevalent work attitude, organizational cynicism has been of major interest to organizational scholars. Although many factors at both the individual and organizational level, as well as meso-level (leader-member exchange) factors, have been argued to influence the development of cynicism in the workplace, there have been few studies that looked at the interaction between these factors (Andersson, 1996; Andersson & Bateman, 1997; Davis & Gardner, 2004; Pugh, Skarlicki, & Passell, 2003). The current research proposes that team-level justice climate (Naumann & Bennett, 2000; Roberson & Colquitt, 2005), as a situational factor, may help to explain when and why some people are more cynical towards organizations than others.

Many organizational and business environmental factors have been shown to result in perceptions of distributive, procedural, and interactional psychological contract violation, perceptions which have been argued to be the mechanism leading to the development of employee cynicism (Andersson, 1996). Organizational factors such as poor communication, limited voice expression, discourteous treatment, and managerial incompetence as well as environmental factors including excessively high executive compensation, harsh layoffs, unjustified profits, and social irresponsibility

have been proposed as antecedents of psychological contract breach, and some of these factors have been empirically tested (Andersson, 1996; Andersson & Bateman, 1997; Pugh et al., 2003).

Although most of these organizational and environmental features are reflections of organizational injustice and repeated exposure to these factors implies that individuals are working under a low level of justice climate, research using a direct examination of justice climate in relation to organizational cynicism is rare. Recent meta-analysis found that unfairness is associated with indicators of the physical and mental health of employees and psychological contract breach by unfairness contributed to the prediction of strain-related indicators of health (Robbins, Ford, & Tetrick, 2012). As this type of psychological contract breach has been argued to be a main cause of organizational cynicism (Andersson, 1996; Pugh et al., 2003) and continuous experience of unfairness in the work environment brings low levels of justice climate, it seems necessary to examine the relationship between justice climate and organizational cynicism more directly.

Among many individual-level characteristics that have been suggested to influence cynicism, such as negative affectivity, self esteem, personality traits, work ethic, and demographic characteristics, locus of control will be examined as a major individual-level factor. As locus of control represents individuals' belief about the sources of control over life events (Rotter, 1966; Levenson, 1974), specific locus of control (internal vs. external, or internal, powerful person, and chance) is expected to influence individuals' interpretations of organizational and environmental factors, and thus will have differential effects on cynicism. While perceptions of fairness of these

features are influenced by individual traits such as locus of control, team-level justice climate is expected to moderate the effect of individual-level attributes as a situational cue.

Organizational Cynicism

Research on cynicism in organizational contexts has less than 20 years of history. While early work on cynicism in psychology took a personality-based approach, the importance of situational factors in the workplace and the attitudinal properties of cynicism towards specific targets has become more of the focus in the organizational literature. The personality-based approach to cynicism used the Cook and Medley hostility scale (1954), a subscale constructed from the Minnesota Multiphasic Personality Inventory (MMPI). The hostility scale represents a type of person who is characterized by a "dislike for and distrust of others" (Cook & Medley, 1954). People who are high on the hostility scale are regarded as seeing others as selfish and uncaring, questioning the motives of others, and being guarded and untrusting in relationships.

Placing more emphasis on contextual factors in the workplace, Andersson (1996) defined employee cynicism as 'both a general and specific attitude, characterized by frustration, hopelessness and disillusionment, as well as contempt toward and distrust of features of the workplace such as top management and /or particular business organizations' as a result of the violation of psychological contracts (Andersson, 1996:1398). It has been proposed that organizations in general, corporate executives, or other workplace objects can be specific targets for employee cynicism (Andersson, 1996; Andersson & Bateman, 1997).

Dean, Brandes, and Dharwadkar (1998) expanded the construct of employee cynicism with the incorporation of three dimensions – belief, affect and behavioral tendencies – that have been argued to be important elements of attitude (Breckler, 1984). They conceptualized organizational cynicism as a 'negative attitude toward one's employing organization, comprising three dimensions: (1) a belief that the organization lacks integrity; (2) negative affect toward the organization; and (3) tendencies to disparaging and critical behavior toward the organization that are consistent with these beliefs and affect' (Dean et al., 1998: 345). The current study adopts this definition of organizational cynicism, while reviewing and building on previous work on employee cynicism as well.

Organizational cynicism can lead to potentially negative consequences for both individuals and organizations. Previous research has found that organizational cynicism is negatively related to the intention to perform organizational citizenship behaviors (Andersson & Bateman, 1997) and individuals' job satisfaction and organizational commitment (Reichers, Wanous, & Austin, 1997). Similarly, Abraham (2000) found that organizational cynicism is positively associated with job dissatisfaction and alienation, and negatively associated with organizational commitment and organizational citizenship behavior. In addition, while managers high in cynicism were shown to be less committed to their subordinates and less likely to change their behaviors toward them even after receiving upward feedback (Atwater, Waldman, Atwater, & Cartier, 2000), employees with high cynicism also showed resistance to organizational change (Reichers et al., 1997). Research also shows that cynical attitudes can generalize to organizations beyond that in which the violation

occurred (Pugh et al., 2003). For example, while harsh and immediate layoffs led to employee cynicism (Andersson & Bateman, 1997), this psychological contract violation by the former employer's layoff decision was transferred to the new employer, resulting in employee cynicism towards the new employer (Pugh et al., 2003).

In contrast to these negative consequences, organizational cynicism has been shown to have some positive organizational outcomes as well. In their seminal theoretical work on organizational cynicism, Dean et al. (1998) proposed that individuals holding a cynical attitude towards their organization may be more likely to speak out against the self-interested or unprincipled behavior of decision-makers in that organization (Dean Jr., Brandes, & Dharwadkar, 1998). This is consistent with the finding that individuals high in cynicism were less likely to comply with supervisors' requests to engage in unethical behaviors (Andersson & Bateman, 1997) and more likely to file grievances (Reichers et al., 1997).

Organizational features such as excessive compensation to executives, poor organizational performance and harsh layoff decisions were found to influence the development of organizational cynicism, as these features signal organizations' lack of integrity and sincerity (Andersson & Bateman, 1997). Andersson and Bateman (1997) maintained that organizational characteristics, practices, and events that may be perceived as a violation of the psychological contract can lead to the development of cynicism. For example, they found that overly high levels of executive compensation and poor organizational performance generated cynicism in white-collar workers (Andersson & Bateman, 1997).

In a discussion of employee cynicism and contract violation, Andersson (1996) examined three dimensions in perceptions of contract violations. Distributive and procedural contract violations are associated more with business environmental factors and job and role characteristics, and interactional and procedural contract violations come from organizational factors (Andersson, 1996). These different dimensions of psychological contract violation perceptions, however, can be regarded as reflections of organizational injustice, and can lead to the development of cynicism as well.

Justice Climate and Organizational Cynicism

In an organizational context, individuals continually interact with others, especially with members within a team, and their perceptions of fairness are shaped in this social context. Recently several researchers have suggested that justice should be considered a team-level construct as well as an individual-level construct. As the most important team-level justice construct, justice climate (Naumann & Bennett, 2000) is defined as team-level cognition about how a work group as a whole is treated. It is the perception of team members of how they are affected by outsiders. The collective perception of fairness is argued to emerge from interactions among peers (Roberson & Colquitt, 2005), and this process is especially strong when the team is cohesive (Naumann & Bennett, 2000) or when members work interdependently (Roberson, 2006).

In line with the three-factor model of organizational justice, procedural justice climate is thought to originate from team members' shared experiences in dealing with organizational policies and practices (Colquitt et al., 2001). How organizational policies are enacted in a team or how the team is affected by certain organizational

practices can contribute to the development of procedural justice climate. In addition, interactional justice climate can also originate from patterns of interaction within a team, including interpersonal treatment between team members or by a manager and information exchange between team members. In this sense, intraunit justice climate (Li & Cropanzano, 2009), which refers to the way people who are part of a group treat one another, can be considered as interactional justice climate, or interpersonal justice climate following Greenberg's (1993) distinction. Although less emphasized in the justice climate literature, distributive justice climate can be established through experiences and interactions within a team regarding distributions of various organizational outcomes, such as pay, promotion, or job security. The ways equity, equality, or needs rules are applied in a team (Adams, 1965; Deutsch, 1985; Leventhal, 1980) can form shared team-level perceptions of the outcome distribution in the team, and thus distributive justice climate may emerge.

Team-level justice has been found to predict many workplace outcomes such as performance, organizational citizenship behavior and turnover, just as individual-level justice does (Liao & Rupp, 2005; Lin et al., 2007; Simons & Roberson, 2003). The present research proposes that team-level justice will also predict members' cynicism towards the organization and interact with individual-level attributes such as locus of control, as it provides certain normative expectations about how things should be administered or how people should behave towards each other within the team.

Among the many antecedents of the breach of the psychological contract (Naus, van Iterson, & Roe, 2007) that lead to organizational cynicism, such as the feeling of being disregarded, or not being treated with respect and dignity (Fleming & Spicer,

2003) can be interpreted as signifying a low level of interactional justice (Bies & Moag, 1986). A lack of sincere participation in the decision-making process and the absence of genuine support by management (Fleming & Spicer, 2003)(Wanous, Reichers, & Austin, 2000) can be regarded as indicating low levels of procedural and interactional justice (Colquitt et al., 2001; (Bies & Moag, 1986). While organizational hypocrisy (Feldman, 2000; Goldner, Ritti, & Ference, 1977), excessively high compensation (Andersson & Bateman, 1997), or downsizings and layoffs (Abraham, 2000; Andersson, 1996; Bateman, Sakano, & Fujita, 1992) can be seen as signifying low levels of distributive justice (Leventhal, 1976), meso-level features such as poor quality leader-member exchange (Cole, Bruch, & Vogel, 2006; Davis & Gardner, 2004) can be interpreted as properties of low interactional justice (Bies & Moag, 1986). Unfairness in organizations, meaning lower levels of procedural, distributive, and interactional justice climate, is assumed to be associated with organizational cynicism. Under high levels of justice climate, fairer and consistent procedures, distribution and interactions are experienced and expected, so it is less likely that a breach of the psychological contract in any dimension would occur. Therefore, it is proposed here that team-level justice climate is negatively associated with members' cynicism.

Hypothesis 1. Justice climate will be negatively associated with cynicism.

1a. Distributive justice climate will be negatively associated with the level of cynicism individuals express towards the workplace.

1b. Procedural justice climate will be negatively associated with the level of cynicism individuals express towards the workplace.

1c. Interpersonal and informational justice climate will be negatively associated with the level of cynicism individuals express towards the workplace.

Locus of Control and Organizational Cynicism

As another source of work attitudes than situational factors, many individual-level dispositional traits including negative affectivity, external locus of control, self esteem, personality traits, and demographic characteristics have been suggested as potential factors in the relationship between psychological contract violations and cynicism (Andersson, 1996). While certain organizational features are likely to be shared in a team and team members are affected by justice climate, individual-level dispositional traits also work as the basis of interpretation of those features.

When contextual factors affect cynicism, the attribution process by which blame is attributed has been considered as an important mechanism. Reichers et al. (1997) suggested that negative attributions for organizational change efforts may explain cynicism when people face negative organizational changes. Davis and Gardner (2004) also maintained that individuals who perceived their work environment as a negative political environment develop cynical attitudes towards the organization. The attribution process within the context of leader-member exchange will lead to certain perceptions of politics, such that highly capable members with high negative affectivity may perceive the leader's LMX behaviors as more political and will be more likely than others to form cynical attitudes (Davis & Gardner, 2004).

As one individual-level trait that is highly related to the attribution process, locus of control (LOC) is the main focus of the current research. Internal LOC is an individual trait that describes the degree to which people believe that they influence

events in their lives (Levenson, 1974). Individuals higher in internal LOC believe that they can control and manage situations through their own actions. Individuals who are lower in internal LOC are less likely to believe that they control what happens to them (Rotter, 1966).

As a motivational trait, it has been found that individuals high in internal LOC tend to be highly empowered and have a higher sense of purpose, and thus are able to influence leaders in ways that may benefit them, rather than feeling the need for the leader's guidance (De Hoogh, Annebel, & Den Hartog, 2009; Ng, Sorensen, & Eby, 2006). In addition, individuals high in internal LOC are more likely to explore and consider ways to achieve their career goals and exert more effort and persistence to overcome barriers to achieve them, and also show higher motivation to learn and engage in developmental activities (Colquitt, LePine, & Noe, 2000; Ng et al., 2006; Spector, 1982; Thornton, 1978). In mentoring research, protégés with higher internal LOC reported more career-related support, psychological support, and role modeling from their mentor, and they were assumed to have initiated that support from mentors (Wang, Tomlinson, & Noe, 2010).

In relation to organizational cynicism, it is expected that high internals will show less organizational cynicism. Individuals with an external LOC see fewer opportunities to change unfair courses of action (Rotter, 1966) as they do not find the source of control in themselves, and therefore they will be left feeling helpless and cynical. In contrast, individuals with high internal LOC (high I-LOC) find the reasons for unfair course of action and actively engage in efforts to bring about desirable

outcomes, Therefore, the following relationship between locus of control and organizational cynicism is hypothesized.

Hypothesis 2. Locus of control (I-LOC, C-LOC, P-LOC) is associated with the level of organizational cynicism.

Hypothesis 2a. Internal locus of control is negatively associated with the level of organizational cynicism.

While most research has used the internal LOC scale, assuming that lower scores on this scale represent external LOC (Allen, Weeks, & Moffitt, 2005; De Hoogh, Annebel, & Den Hartog, 2009; Judge & Bono, 2001; Lam & Schaubroeck, 2000; Ng et al., 2006; Spector, 1982; Wang, Bowling, & Eschleman, 2010; Wang et al., 2010), Levenson (1974) earlier proposed that the I-E scale was not unidimensional, and thus there was a need to differentiate the sources of external control. The broad definition of externals as compared to internals does not distinguish between fate, chance, or powerful others as the source of control. This lack of distinction between sources of control resulted in conflicting findings on the effect of the I-E construct, especially related to those who are proactive in social action (Levenson, 1974). Therefore, Levenson (1974) revised the previous internal-external locus of control construct to create a multidimensional construct, including three sources of control – Internal, Powerful Others, and Chance – and constructed a scale as well (I-P-C scale). This three-factor structure was confirmed and utilized by others as well (Detert, Treviño, & Sweitzer, 2008; Walkey, 1979). The current study applies this tripartite structure of locus of control as it can contribute to an understanding of interactions with different facets of justice climate.

Levenson (1974) argued further that people who believe that chance will control their life events will cognitively and behaviorally differ from those who are low on the internal LOC scale, and also differ from those who believe that powerful others are in control of their life events. People high on chance locus of control (high C-LOC) do not believe that the world is an orderly place and they consider life experiences and outcomes as a result of fate or luck. As they do not take a person's initiatives as meaningful causes of outcomes, even if they find misconduct or unfair systems in the workplace, they may not try to change the course of action of a system by themselves but rather will remain cynical towards the organization. Therefore, it is proposed here that individuals with higher chance locus of control (high C-LOC) are associated with higher levels of cynicism.

Hypothesis 2b. Chance locus of control is positively associated with the level of organizational cynicism.

People high on the powerful others dimension (high P-LOC), unlike those who are high on the chance dimension (high C-LOC), are expected to proactively participate in social action as an instrumental attempt to effect change. In contrast to those high in chance locus of control, people in high P-LOC believe that the world is relatively predictable and orderly, but powerful others are in control of events (Levenson, 1974). They are more likely to attribute unfair courses of action or events in the workplace to those in a position of power. When an authority figure decides the process or rules in the organization, people high in P-LOC are likely to be somewhat obedient but remain cynical towards those decisions as they do not believe they have the power to change them.

Although it did not distinguish between power and chance locus of control, previous research found that charismatic leadership was associated with lower burnout, particularly for individuals low in internal LOC (De Hoogh, Annebel, & Den Hartog, 2009), which may support the proposed relationship between power locus of control and cynicism. Those lower in internal LOC were regarded as being more receptive to the influence of leaders who they perceived as charismatic than were those with a high internal locus (cf. Ng et al., 2006). If they had distinguished between people who are high in P-LOC and high in C-LOC, this exposure to certain types of organizational features (e.g., leadership style) could have provided more insights into the dynamics of organizational cynicism. It is expected that those high in P-LOC are more receptive to the influence of leaders and consider leaders' character more seriously than those high in C-LOC or those high in I-LOC, as they believe their life events are dependent on those leaders in power. At the same time, due to the lack of control in themselves, those high in P-LOC may remain cynical toward the leader or organization. Therefore, it is proposed here that individuals with higher power locus of control (high C-LOC) are associated with higher levels of cynicism.

Hypothesis 2c. Power locus of control is positively associated with the level of organizational cynicism.

Moderating Role of Justice Climate

In the present study, the existence of justice climate at the team level is one of the important moderating dimensions. The previously discussed tripartite loci of control (I-LOC, C-LOC, P-LOC) are expected to interact with different facets of organizational justice. For example, with high group-level justice in a group, meaning

group perception of fairness in the workplace, members share similar perceptions and normative expectations about how things should be administered or how people should interact with each other. This high team-level justice can be developed by fair organizational procedures and policies and also reinforced by fair implementation of existing procedures. While external LOC, power and/or chance LOC leads to more cynical attitudes (Hypotheses 2b and 2c), justice climates are assumed to have buffering effects by attenuating this positive relationship between external locus of control and organizational cynicism.

Procedural justice climate emerges from the way the rules and procedures are applied in teams (Naumann & Bennett, 2002), and it relates to the degree of certainty and consistency in a team. Under high levels of procedural justice climate, the way rules are to be administered in a team is quite predictable and consistent. In contrast, under low levels of procedural justice climate, individuals in a team do not have a clear sense of what to expect. Although people with high chance locus of control (C-LOC) attribute most events or actions to chance or fate, it is also likely that under low levels of procedural justice climate, people in general would be affected by this uncertainty and inconsistency in a team when they make attributions of blame for unfair events. Without certainty that organizational procedures will be administered fairly or that their voices will be heard, people would remain helpless and cynical towards the organization. While it is proposed that those high in C-LOC would be more cynical toward the organizations (Hypothesis 2b), the levels of procedural justice climate would moderate this relationship. Therefore, it is proposed here that the

positive relationship between chance locus of control and cynicism would be attenuated under low levels of procedural justice climate.

Hypothesis 3. Justice climate will moderate the relationship between locus of control and organizational cynicism.

Hypothesis 3a. Procedural justice climate will moderate the impact of chance locus of control on cynicism. The lower the procedural justice climate, the weaker the impact of chance locus of control on cynicism will be.

Distributive justice climate regarding distributions of work, pay, promotion, or job security in a team is related to the equity, equality, or needs rules (Adams, 1965; Deutsch, 1985; Leventhal, 1980). With higher levels of distributive justice climate, team members accept the application of those rules regarding outcome distributions since they are considered fair. As with procedural justice climate, it is a systemic feature of organizations or teams and will moderate the relationship between C-LOC and organizational cynicism. Under low levels of distributive justice climate, no clear rules are applied in a consistent way, and thus distributions arbitrarily made behind the scenes produce high levels of uncertainty or perceptions of inconsistency among team members. Therefore, as with procedural justice climate, the levels of distributive justice climate would moderate this relationship. Therefore, it is proposed here that the positive relationship between C-LOC and cynicism would be attenuated under low levels of distributive justice climate.

Hypothesis 3b. Distributive justice climate will moderate the impact of chance locus of control on cynicism. The lower the distributive justice climate, the weaker the impact of chance locus of control on cynicism will be.

With regard to uncertainty and inconsistency, which might attenuate the relationship between chance locus of control and cynicism, it is also worthwhile to consider the moderating role of informational justice climate. Informational justice climate specifically refers to the fairness of information exchange between team members and authority figures. Under high levels of informational justice climate, leaders candidly give complete information on procedures with a reasonable amount of explanation in a timely manner as well as reflecting individuals' specific needs (Bies & Moag, 1986; Bies, 2005; Shapiro, Buttner, & Barry, 1994). With this fullness of information provided, it is expected that the positive relationship between C-LOC and cynicism will be attenuated under high levels of informational justice climate.

Hypothesis 3c. Informational justice climate will moderate the impact of chance locus of control on cynicism. The higher the informational justice climate, the weaker the impact of chance locus of control on cynicism will be.

People with high P-LOC find powerful figures in control of their own life events. Thus, systemic features that lessen the impact of powerful persons in the organization would attenuate the positive effect of P-LOC on cynicism. High levels of procedural justice climate may have that impact by impersonalizing organizational procedures and guaranteeing members' voices in the process. On the contrary, low levels of procedural justice climate would amplify the effect of P-LOC on cynicism by giving more power and control to the person who administers the procedure. Therefore, it is proposed that the positive relationship between P-LOC and cynicism would be attenuated under high levels of procedural justice climate.

Hypothesis 3d. Procedural justice climate will moderate the impact of power locus of control on cynicism. The higher the procedural justice climate, the weaker the impact of power locus of control on cynicism will be.

In addition, people high in P-LOC may be influenced by the level of interactional justice climate that is directly related to the characteristics of the leader in a team. Interpersonal justice climate refers to the way leaders interact with other members in a team. High levels of interpersonal justice climate represent a team environment where the leader treats members in a polite manner with dignity and respect, avoiding improper remarks (Bies & Moag, 1986). As previously discussed, leaders also show a fair way of information exchange with members in a team under high levels of interactional justice climate. Both interpersonal and interactional justice climate describe the characteristics of leaders' behavior related to other members in a team, and a high level of interactional justice climate signals that the leader is likely to be credible and trustworthy.

While individuals with high P-LOC believe that these leaders control most of their own work life, it becomes very difficult to find reasons to blame leaders if they show these characteristics under high levels of interactional justice climate. Under low levels of interactional justice climate, people in general would show cynicism due to their continuous exposure to unfair treatment by their leaders. However, the positive relationship between P-LOC and cynicism would be amplified under high levels of interactional justice climate, as team members find no reason to blame or even try to change their leaders, who are considered to control their work lives. Therefore, it is expected that this interactional justice climate – both interpersonal and informational –

would moderate the relationship between P-LOC and cynicism.

Hypothesis 3e. Interactional justice climate will moderate the impact of power locus of control on cynicism. The higher the interactional justice climate, the stronger the impact of power locus of control on cynicism will be.

The current hypotheses on the moderating role of justice climate therefore distinguish among the different sources of external locus of control. While the impact of P-LOC on cynicism would be amplified under the low levels of procedural justice climate, that of C-LOC on cynicism would be attenuated due to the increased level of uncertainty and inconsistency. Interactional justice climate is also expected to show a differential moderating impact for P-LOC and C-LOC, such that under high interactional justice climate, the impact of C-LOC on cynicism would be attenuated in contrast to that of P-LOC, which would be amplified.

Methods

Data and sample.

Survey data were collected from work teams in Korean organizations across two rounds of surveys. A work team was defined as individuals working together with complementary skills and knowledge and reporting directly to the same supervisor (team leader). In addition, a work team is the smallest functional unit in the organization, working toward a common goal on a recurring basis. The author queried organizations regarding their groups' interest in participating before the survey was conducted. Because of this effort, most groups to which surveys were distributed returned completed surveys, yielding a response rate of 91% (80 out of 90 teams) for the first-round survey (Time 1) and 98% (73 out of 80) for the second-round survey

(Time 2). The final sample consisted of 333 employees nested in 73 teams from 14 organizations.

A diverse range of organizations in Korea was sampled. Industries represented by the 14 organizations included retailing, manufacturing, finance, R&D, information technology, energy, and services. This diversity of industries was intentional to avoid contextual influences specific to industry type. In the final sample of 73 work teams, team size ranged from 2 to 14, with an average size of 5 (SD = 1.79). Of the teams sampled, 27 teams had 5 members and 11 teams had 6 to 9 members. Thirty-five teams had 2 to 4 members, with one team consisting of 14 members. Sampling a limited number of employees within groups (e.g., 3 to 7) has been advanced as an acceptable measure in previous multilevel justice-related studies (e.g., Ambrose & Schminke, 2003; Schminke, Cropanzano, & Rupp, 2002). Among participants, 69% were men, and 97.2% had two-year college or higher degrees. Age of participants ranged from 20 to 50, with a mean age of 31 years. Regarding organizational tenure, 12% had been with the organization less than 1 year, 45% between 1 and 5 years, and 43% for more than 5 years. On team tenure, 25% of participants had been on their current team less than 1 year, 38% between 1 and 3 years, 20% between 4 and 6 years, and 17% more than 6 years. All of the respondents were full-time employees, and data were collected from team members in non-managerial positions.

Procedures.

One representative (most of them were HR managers) of each organization was informed orally of the general nature of the study and asked to inquire about team members' interest in the survey to ensure voluntary participation. A package for each

work team contained one supervisor survey and five team member surveys, with extra surveys in case teams exceeded five members. Each survey was distributed in an envelope that was also used for a return. The representative in each organization collected the completed and sealed surveys from each team. Each questionnaire had a cover letter that explained the nature of the research and assured confidentiality to participants. Contact information for the researcher was also included in the cover letter. The representative distributed surveys to team members within the groups in each organization. On completion, most of the respondents sealed their surveys in the envelopes provided and returned them through the representative. The representatives then handed the completed surveys from each team to the author.

Surveys were conducted two times with a 2-week interval. The second-round survey was distributed in the same way as explained above, two weeks after the completion of the first-round survey.

Measures.

Individual-level variables and team-level variables were measured over the two rounds of surveys. Individual-level variables included trait negative affectivity, locus of control, and organizational cynicism. Team-level variables included procedural, distributive, informational and interpersonal justice climate. The Time 1 survey included individual trait affectivity, locus of control, and justice climate measures as well as control variables including age, sex, team tenure and team size. The Time 2 survey included organizational cynicism variable as well as the same control variables. Independent variables and dependent variables were measured at different time points to minimize common source bias. Descriptive statistics including means, standard

deviations, and correlations of variables included in the models are presented in Table 1.

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Insert Table 1 about here

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Negative affectivity (NA). Individual trait negative affectivity was measured using a 20-item scale, the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) in the Time 1 survey. Participants responded to the statement "Please indicate to what extent you have felt this way during the past week" on a 5-point Likert scale ranging from (1) not at all to (5) extremely. Each scale for positive affectivity (PA) and negative affectivity (NA) was constructed by averaging responses to ten adjectives describing positive and negative affectivity. Scale reliability (Cronbach's coefficient α) was 0.94 and 0.91 for PA and NA respectively. Due to the high degree of correlation between PA and NA affectivity ($\alpha = -0.058$, $p < .05$), only NA was included in the model as an individual-level control variable.

Locus of control (LOC). Locus of control was measured using the 24 items from the I-P-C scale developed by Levenson (1974). The I-P-C scale is a revised version of Rotter's I-E scale of locus of control (Rotter, 1966), consisting of three subscales including internal locus of control (I-LOC), power locus of control (P-LOC), and chance locus of control (C-LOC), with eight items each. Sample items include "I am usually able to protect my personal interests (I-LOC)," "I feel like what happens in my life is mostly determined by powerful people (P-LOC)," and "I have often found that what is going to happen will happen (C-LOC)." Participants responded to each item

on a 6-point Likert scale, so a higher score on each subscale reflects a higher degree of the respective locus of control.

Organizational cynicism (OCY). Employee cynicism towards the present organization was measured with five items from a scale developed by Dean et al. (1998). The items were designed to measure the belief that the organization lacks integrity. The five items were as follows: "I believe that my company says one thing and does another," "My company's policies, goals, and practices seem to have little in common," "When my company says it's going to do something, I wonder if it will really happen," "My company expects one thing of its employees, but rewards another," and "I see little similarity between what my company says it will do and what it actually does." Participants were asked to answer on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. The items were averaged to form individual-level organizational cynicism (OCY) measures.

Group-level justice. Group-level justice measures based on the four-factor model by Colquitt (2001) were used to analyze organizational justice in the Time 1 survey.

Following the reference-shift composition model (Chan, 1998), individuals rated team-level justice – procedural, distributive, informational and interpersonal justice climate – with reference to their team. Individuals read the following statements: "The following items refer to the procedures used to arrive at your outcomes in your team. To what extent have you been able to express your views and feelings during those procedures in your team [procedural justice climate]?" "The following items refer to your outcome in your team. To what extent does your outcome reflect the effort you have put into your work in your team [distributional justice climate]?" "The following

items refer to your team leader. To what extent has he/she treated you in a polite manner [interpersonal justice climate]?" "The following items refer to your team leader. To what extent has he/she explained the procedures thoroughly [informational justice climate]?" All items used a 5-point Likert scale ranging from (1) to a small extent to (5) to a large extent.

Individual scores were aggregated to the team level. In order to construct the level-2 variables, individual responses to procedural justice climate, distributive justice climate, informational justice climate, and interpersonal justice climate were aggregated to the team level. For construct validity, within-group agreement in members' perceptual ratings was examined by intra-class correlations (ICC (1) and ICC (2)) for each team-level variable. ICC (1) refers to intra-class correlations among members of the same team, showing similarity in patterns of ratings made by different raters. ICC (1) values for team level justice climate ranged from 0.17 to 0.21, showing that at least 17% to 21% of the variance in ratings of justice climate is explained by team membership. On the other hand, ICC (2) shows the degree of reliability of team level scores, that is, averaged scores for each team for respective variables. ICC (2) values ranged from 0.51 to 0.56 with the average number of team members per group k=4.7. For additional support for aggregation of individual responses to the team level, inter-rater agreement, $r_{wg(j)}$ (James, Demaree, & Wolf, 1984) was examined for each team by comparing observed group variance to an expected random variance. The uniform distribution was chosen for comparison, and the averaged $r_{wg(j)}$ for each team level variable varied from 0.71 to 0.76.

Control variables. Demographic information including sex (male = 1, female = 0), age, organizational tenure (in months), team tenure (in months), title, team characteristics including team size and function, and industry were included in both surveys.

Results

Preliminary analyses

Table 1 includes descriptive statistics and correlations among variables in the model. Although included in the preliminary analyses, non-significant control variables were dropped from the model except for negative affectivity (NA) at the individual level and team size at the team level, after model comparisons were made by comparing deviance statistics.

Due to few missing data points at the individual level, the hypothesized models were analyzed with five imputed datasets constructed from Markov Chain Monte Carlo (MCMC) methods. Rubin (1987) suggested that multiple imputation (MI) is a Monte Carlo technique in which the missing values are replaced by $m > 1$ simulated versions, where m is typically small (e.g. 3-10, m = 5 in the current study). Based on the assumption that missing values are missing at random (MAR, Rubin 1976), repeated imputation inference was made by analyzing each of the simulated complete datasets by standard methods. Then the results were combined to produce estimates and confidence intervals that incorporate missing-data uncertainty. Although no variable had more than 5% of missing values in the current dataset, the multiple imputation technique was applied to the analyses in order to avoid case deletion by statistical software. As case deletion generally leads to valid inferences only when

missing data are missing completely at random (MCAR) in the sense that the probabilities of response do not depend on any data values observed or missing, which is a much stronger assumption than the current assumption of MAR (Little & Rubin, 2002), the multiple imputation method was a more plausible choice.

Hierarchical linear modeling (HLM 7.0; Raudenbush, Bryk, & Congdon, 2010) was used to test the hypothesized cross-level moderating effects. At Level 1, individual-level outcome variables such as organizational cynicism were regressed on negative affectivity and three locus of control variables. At Level 2, the pooled values of the Level 1 parameters were used as dependent variables that are predicted by four facets of justice climate, controlling for team size. Level 2 variables were grand-centered for the interpretation of the effects.

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Insert Table 2 about here

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As can be seen in Table 2, an analysis of the unconditional means model, a null model with the only dependent variable being organizational cynicism, showed that a significant portion of the total variances for organizational cynicism could be explained by between-team variance (ICC = 0.1). In multi-level design where group mean is the unit of analysis, Level-2 variables should be accounted for in the model, although the ICC of dependent variable was as small as 0.01, because the probability of Type I error is 0.06 even when the number of entities is 10 in one group and ICC is 0.01, and it becomes larger with larger ICC values and the number of entities (Barcikowski, 1981).

Test of main effects of justice climate and locus of control on organizational cynicism

Controlling for individual negative affectivity and team size, Hypothesis 1 and Hypothesis 2 predicted the main effects of justice climate and locus of control on organizational cynicism. To test these main effects, individuals' organizational cynicism was regressed on team-level justice climate and individual-level locus of control. At level 2, justice climate variables and team size were modeled to have effects on the Level 1 intercept only. In this intercept-as-outcome model, the main effects of variables on organizational cynicism were analyzed (see Table 3).

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Insert Table 3 about here

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Among level 2 variables, the distributive justice climate showed significant negative main effects on organizational cynicism (γ_{04} = -0.36, *SE* = 0.15), t(67) = -2.48, $p < .05$. Furthermore, team size, which was a control variable at level 2, also showed significant negative main effects on cynicism (γ_{01} = -0.05, *SE* = 0.01), t(67) = -3.83, $p < .001$. These results indicated that individual-level cynicism was affected by team-level characteristics such as team size and justice climate. People in a large team tended to show less cynicism than those in a smaller team, and those working under high distributive justice climate tend to show less cynicism. Conversely, those working in a small team tended to express more cynicism than those in a larger team, and those working under low distributive justice climate tended to express more cynicism. This cross-level main effect of distributive justice climate supported

Hypothesis 1a. Procedural justice climate and interactional justice climate did not show statistically significant negative main effects on cynicism, although the direction of procedural and informational justice climate was consistent with the prediction.

Among level 1 variables, internal locus of control showed negative main effects on cynicism as expected (γ_{30} = -0.03, *SE* = 0.008), t(72) = -3.47, p < .001. In addition, negative affectivity, which was a control variable at level 1, also showed positive significant main effects on cynicism (γ_{10} = 0.23, *SE* = 0.07), t(72) = 3.31, p < .001. Therefore, as predicted by Hypothesis 2a, the higher the I-LOC one had, the lower the degree of cynicism indicated. It should also be noted that although the effects were not statistically significant, both P-LOC and C-LOC were positively associated with the level of cynicism in the predicted direction.

Moderation of justice climate in the relationship between locus of control and cynicism

Hypotheses 3a-3e predicted a moderating role of justice climate on the relationship between locus of control and organizational cynicism. In particular, the effects of external locus of control (P-LOC and C-LOC) were hypothesized to be differentially moderated by justice climate. As different facets of justice climate work as important environmental factors that individuals might consider in forming their attitudes towards the organization, these justice climate factors are expected to affect those who are high in power locus of control or chance locus of control.

Using a slope-as-outcomes model, the moderating role of justice climate variables was analyzed. Level 2 variables including justice climate variables (PJC, DJC, IFJC, IPJC) and team size were modeled to have effects on Level 1 intercept and

slopes for different loci of control (I-LOC, P-LOC, C-LOC) on organizational cynicism. Four facets of justice climate and team size as the control variable were modeled to interact with three locus of control variables and negative affectivity which was the level 1 control variable.

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Insert Table 4 about here

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As shown in Table 4, justice climate showed significant moderating influences on the relationship between locus of control and organizational cynicism. Specifically, consistent with Hypothesis 3a, procedural justice climate moderated the relationship between chance locus of control (C-LOC) and cynicism (γ_{42} = 0.09, *SE* = 0.04), t(67) = 2.14, p < .05. The nature of this interaction is depicted in Figure 1 and it is consistent with Hypothesis 3a. Distributive justice climate did not show statistically significant moderating effects, and thus Hypothesis 3b was not supported.

In addition, informational justice climate also moderated the relationship between chance locus of control (C-LOC) and cynicism (γ_{45} = -0.09, *SE* = 0.03), t(67) = -2.74, p < .001, thus supporting Hypothesis 3c. The pattern of this moderating role of informational justice climate is depicted in Figure 2 and is consistent with Hypothesis 3c.

Using the intercept-as-outcome model as a baseline, two variance components in the Level 1 slope relating chance locus of control to cynicism were compared to examine the added explanation of these interaction terms in the model. The pseudo-R^2 was 0.26 (i.e., [τ_{11b}- τ_{11M}]/ τ_{11b} , [35.17-25.92]/35.17 = 0.26.), showing that 26% of

variances of C-LOC-to-cynicism slope was better explained by interaction terms with justice climate and C-LOC.

With regard to the P-LOC and cynicism relationship, procedural justice climate did not show statistically significant moderating effects, and thus Hypothesis 3d was not supported. However, in support of Hypothesis 3e, informational justice climate moderated the relationship between power locus of control (P-LOC) and cynicism (γ_{25} = 0.08, *SE* = 0.03), t(67) = 3.07, p < .001. Interpersonal justice climate did not show statistically significant interaction with P-LOC. By using two variance components from the intercept-as-outcome model and the slope-as-outcome model in the Level 1 slope relating P-LOC to cynicism, the pseudo-R^2 for informational justice climate explaining the effects of power locus of control was 0.07 (i.e., $[\tau_{11b}- \tau_{11M}]/ \tau_{11b}$, [15.84-14.71]/15.84 = 0.07). This significant interaction is shown in Figure 3.

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Insert Figure 1 about here

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Consistent with Hypothesis 3a, Figure 1 demonstrates that the positive relationship between C-LOC and cynicism is attenuated under low levels of procedural justice climate. Individuals working under low procedural justice climate experience more uncertainty and inconsistency in the system, so it would seem to make them more cynical toward the organization even when they have a low level of chance locus of control. However, under high levels of procedural justice, the positive relationship between C-LOC and cynicism holds, such that people with high levels of C-LOC tended to show more cynicism towards the organization.

Consistent with Hypothesis 3c, Figure 2 demonstrates that under high levels of informational justice climate, the positive relationship between C-LOC and cynicism is attenuated. High levels of informational justice climate imply that information sharing and communication by a team leader is candid, thorough, timely and based on individuals' needs (Colquitt, 2001).

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Insert Figure 2 about here

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With high levels of informational justice in a team, the effect of C-LOC in individuals on cynicism is decreased, as full information shared by a leader can work as a strong situational factor affecting attribution even for those high in C-LOC. Under low informational justice climate, however, low predictability and credibility in the way leaders behave may make the positive relationship between C-LOC and cynicism even more salient.

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Insert Figure 3 about here

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Figure 3 demonstrates that the positive relationship between P-LOC and cynicism is attenuated when informational justice climate is low. As postulated in Hypothesis 3e, high informational justice climate may make it difficult to attribute unfair events to leaders, and thus the positive effect of P-LOC on cynicism becomes more salient. It appears that people with high P-LOC are more cynical with fair

leaders than with unfair ones, as in former case, there is little room to blame leaders in terms of their behavior for what happened.

Discussion

The current study tries to examine potential interactions between individual-level locus of control variables and team-level justice climate in terms of their effects on organizational cynicism. While individual and team-level factors have their unique main effects on cynicism, their interactions, especially between two external locus of control variables and different facets of justice climate, were hypothesized and tested. Distributive justice climate and internal locus of control had significant negative main effects on the level of organizational cynicism.

In the theory of employee cynicism, it was also argued that people show more cynicism when the cynicism works as a group norm (Andersson, 1996). Under low levels of justice climate – procedural, distributive, and interactional – it is more likely that unfairness becomes the norm in teams as well as cynicism. However, among different facets of justice climate, only distributive justice climate was found to significantly affect cynicism. Fairness regarding outcomes themselves was more influential in deciding attitudes towards the organization. Montes and Zweig (2009) found that the actual delivery of promises in a team matters more than the promises themselves. Contrary to the extant literature, they suggested that the way promises were made may matter little and employees are concerned primarily with what the organization delivers (Montes & Zweig, 2009). These findings may support the differential impact of each justice facet on organizational outcomes, including that on organizational cynicism.

Having a sense of control over events predicted the degree of cynicism at work. Individuals with high internal locus of control are more likely to proactively challenge the wrongdoing of leaders or organizations, or change their own actions to impact the outcomes. Based on the belief that one's efforts can produce significant changes in the way organizations act, individuals with a high level of internal locus of control may seek constructive conflict resolution procedures at workplace, as they believe those actions can change future outcomes.

Informational justice climate showed significant moderating effects on the relationship between power and chance locus of control, but in opposite directions. While high informational justice climate attenuated the positive effects of C-LOC, it amplified the positive effects of P-LOC on cynicism. These different moderating effects can be explained by the distinct nature of these two external locus of control dimensions as Levenson (1974) earlier pointed out.

David and Gardner (2004) examined the relationship between LMX and cynicism, and their use of leader communication style shed light on the impact of information justice on two external locus of control variables. They argued that while aligning leader communication would contributed to lower levels of cynicism, polarizing communication behavior would produce high organizational cynicism (Davis & Gardner, 2004). A polarizing communication pattern refers to distancing behaviors, including power games, competitive conflict, and performance monitoring (Fairhurst, 1993). Low informational and interpersonal justice climate may reflect similar patterns of polarizing communications between a team leader and members. For example, low interpersonal justice climate refers to a team leader's impolite

manner, treatment of team members without dignity or respect, and improper remarks or comments to members. Low informational justice climate includes dishonest communications, not explaining procedures in a thorough, timely or reasonable manner, and not reflecting individuals' needs in communications (Bies & Moag, 1986; Colquitt, 2001; Shapiro et al., 1994).

On the other hand, aligning communication behaviors refer to coaching, support, value congruence, non-routine but proactive problem solving, and insider joking (Fairhurst, 1993), which can be accomplished by having high levels of informational and interpersonal justice climate. In these situations, people with high P-LOC would find it very hard to hold their leaders responsible and blame them for something that harmed them in any way. Therefore, the positive impact of P-LOC on cynicism would be more salient and amplified as team members do not believe that they themselves can control their life events, but they also cannot find fault with their leaders under high levels of informational justice. However, the fullness of information provided by the team leader and having a fair authority figure in a team may attenuate the positive relationship between C-LOC and cynicism.

Procedural justice climate was found to moderate the effects of chance locus of control on cynicism, such that the positive relationship between C-LOC and cynicism is attenuated under low levels of procedural justice climate. Therefore, individuals with high C-LOC are actually less cynical under low procedural justice climate than under high procedural justice. With high levels of uncertainty under low levels of procedural justice, people with high C-LOC may find a way to abuse the system. A recent study found that people with chance locus of control are more likely to engage

in moral disengagement as they can detach their own actions from the results more easily than others (Detert et al., 2008). Rather than remaining cynical and helpless under low procedural justice climate, people with high C-LOC might engage in behaviors that may be considered unethical. The intention to take unethical or immoral actions was not examined in the current study, but the moderating effects of justice climate on the relationship between locus of control and potential behavioral reactions can be examined further.

The study of organizational cynicism needs further attention from organizational researchers. With the global economic downturn and civil movements against the unethical conduct of major business corporations, cynicism is likely to be the most frequent attitude in the workplace. A recent study on cynicism even included organizational cynicism as a distinct response in the extended Exit, Voice, Loyalty, and Neglect model of employees' responses to adverse organizational circumstances (Naus et al., 2007).

In addition, research on power and chance locus of control has been rather limited in scope. In recent mentoring research, the relationship between mentors' cognition-based trust in their protégés and the protégés' reports of receiving career-related support, psychological support, and role modeling was stronger for protégés with lower internal LOC (Wang et al., 2010). Even if protégés do not show high levels of confidence and persistence and are reluctant to proactively influence the mentoring relationship due to their low internal LOC, mentors' trust in their protégés based on their cognitive assessment encourages the mentors to help them. If the different sources of control had been considered in the study, the role of high levels of

interpersonal and informational justice climate could have been examined further. The current study suggests that there may be potentially different interactions between each facet of justice climate and power or chance locus of control. The relationship between procedural features of organizations and leadership characteristics in teams can moderate the impact of individual-level locus of control.

The current study is not without its limitations**.** The major limitation of the current study is the use of self-report survey methods without behavioral observations. An attempt was made to minimize the potential for common method bias by using surveys at two different time points. Dependent variables and independent variables were collected at different time points, with the expectation that this would minimize bias. In addition, the sensitive nature of the dependent variable – organizational cynicism – might have made respondents answer in socially desirable ways. However, the mean and standard deviation of organizational cynicism were 2.78 and 0.88 respectively, and the Q-Q plot of organizational cynicism showed that the variable had a generally normal distribution.

Despite these limitations, this study contributes to the research on cynicism, core self-evaluations, and justice by showing the moderating role of justice climate on the relationship between locus of control and cynicism. The results suggest that among the many contextual variables affecting individuals' work attitudes, group-level justice constructs provide individuals with a reference point for interpreting certain events, thus leading to different moderating effects according to the locus of control. More work should be done to examine the nature of the interaction between justice facets

and locus of control and the effect of this interaction on job-related attitudes and satisfaction.

APPENDICES

Table 1. Descriptive Statistics and Correlations [a]

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Negative affectivity	2.39	0.78	_									
2. Power locus of control	27.18	5.57	0.35**	_								
3. Internal locus of control	28.4	4.64	-0.24**	-0.12*	_							
4. Chance locus of control	25.33	5.22	0.39**	0.73**	-0.23**	_						
5. Organizational cynicism	2.78	0.88	0.42**	0.39**	-0.32**	0.42**	_					
6. Procedural Justice climate	3.92	0.52	-0.26**	-0.004	-0.26**	-0.1	-0.26**	_				
7. Distributive Justice climate	3.2	0.52	-0.25**	-0.02	0.28**	-0.08	-0.33**	0.68**	_			
8. Interpersonal Justice climate	4.21	0.52	-0.24**	-0.08	-0.25**	-0.12*	-0.2**	0.74**	0.57**	_		
9. Informational Justice climate	3.65	0.49	-0.29**	-0.07	-0.25**	-0.1	-0.25**	0.72**	0.68**	0.69**	_	
10. Team size	5.3	2.3	-0.06	-0.04	-0.09	-0.14*	-0.16**	0.14*	0.21**	0.13*	0.14*	_

[a] This table shows means, standard deviations, and correlations with variables in the model. N=333 individuals.

*p < .05

**p < .01

Table 2. Hierarchical Linear Modeling Estimates of Null Model

Dependent Variable	γ_{00}	σ^2	τ_{00}	Intraclass correlations [a]
Organizational cynicism	2.79 (0.06)	0.7	0.08	0.1

Note. N = 333. γ_{00} = pooled intercept; σ^2 = within-team variance; τ_{00} = between-team variance. [a] Intraclass correlations (ICC) = $\tau_{00}/(\sigma^2 + \tau_{00})$.

Table 3. Hierarchical Linear Modeling Results for the Main Effects of Justice Climate and Locus of Control [a]

	Organizational Cynicism		
Variables	**Coefficient (γ_{ij})**	**t**	**df**
Level 1			
Negative Affectivity γ_{10}	**0.23 (0.07)**	**3.31****	**72**
Power Locus γ_{20}	0.02 (0.01)	1.8	72
I Locus γ_{30}	**- 0.03 (0.00)**	**-3.47****	**72**
C Locus γ_{40}	0.02 (0.01)	1.56	72
Level 2			
Intercept γ_{00}	1.97 (0.38)	5.2**	67
Team size γ_{01}	- 0.05 (0.01)	-3.83**	67
Procedural justice climate γ_{02}	- 0.06 (0.12)	-0.53	67
Interpersonal justice climate γ_{03}	0.17 (0.12)	1.45	67
Distributive justice climate γ_{04}	**- 0.36 (0.15)**	**-2.48***	**67**
Informational justice climate γ_{05}	- 0.06 (0.13)	-0.43	67

[a] This table shows results of an intercept-as-outcomes analysis. Level 1, n= 333 individuals; Level 2, n=73 teams. Level 2 variables were centered by the grand mean. The t-tests associated with γ_{20} - γ_{40} parameters show the relationship between each locus of control scale and organizational cynicism. The t-tests associated with γ_{00} - γ_{05} parameters show the relationship between each justice climate dimension and organizational cynicism.
*p < .05, **p < .001

Table 4. Results of Analyses of the Moderating Effects of Justice Climate in Locus of Control-Cynicism slopes [a]

Variable	Organizational Cynicism	
Level 2	**Coefficient (γ_{ii})**	**T (df=67)**
Power Locus Slope β_2		
Intercept γ_{20}	0.02	1.65
Team size γ_{21}	0.01	2.19
Procedural justice climate γ_{22}	-0.01	-0.17
Interpersonal justice climate γ_{23}	-0.06	-1.96
Distributive justice climate γ_{24}	-0.01	-0.19
Informational justice climate γ_{25}	0.08	3.07**
Internal Locus Slope β_3		
Intercept γ_{30}	-0.04	-3.86**
Team size γ_{31}	0.01	1.29
Procedural justice climate γ_{32}	-0.01	-0.49
Interpersonal justice climate γ_{33}	0.03	0.83
Distributive justice climate γ_{34}	-0.02	-1.11
Informational justice climate γ_{35}	0.03	1.17
Chance Locus Slope β_4		
Intercept γ_{40}	0.02	1.87
Team size γ_{41}	-0.02	-4.03**
Procedural justice climate γ_{42}	0.09	2.14*
Interpersonal justice climate γ_{43}	0.01	0.28
Distributive justice climate γ_{44}	-0.01	-0.34
Informational justice climate γ_{45}	-0.09	-2.74**

[a] This table shows the results of a slope-as-outcome analysis. Level 1 n= 333 individuals; Level 2 n=73 teams. Level 2 variables were centered by the grand mean. This model regresses the locus of control-organizational cynicism slopes ($\beta_2 - \beta_4$) on justice climate, controlling for team size and negative affectivity. The t-tests associated with $\gamma_{22-}\gamma_{25}$ parameters show the relationship between each justice climate dimension and locus of control-organizational cynicism slope, testing the cross-level moderating effects of justice climate.
*p < .05, **p < .01

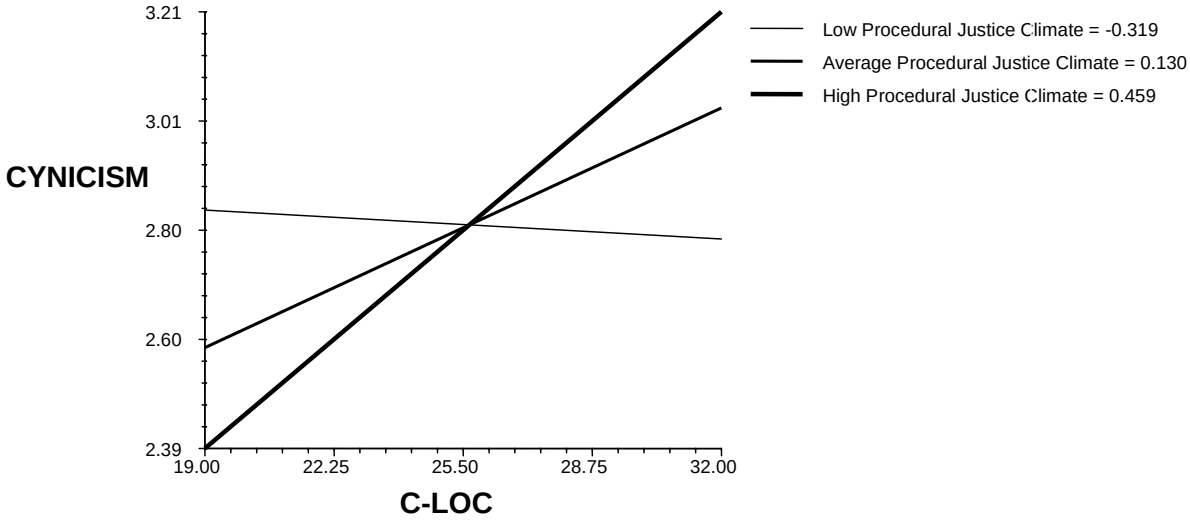

Figure 1. Moderating effect of procedural justice climate on the relationship between chance locus of control and organizational cynicism

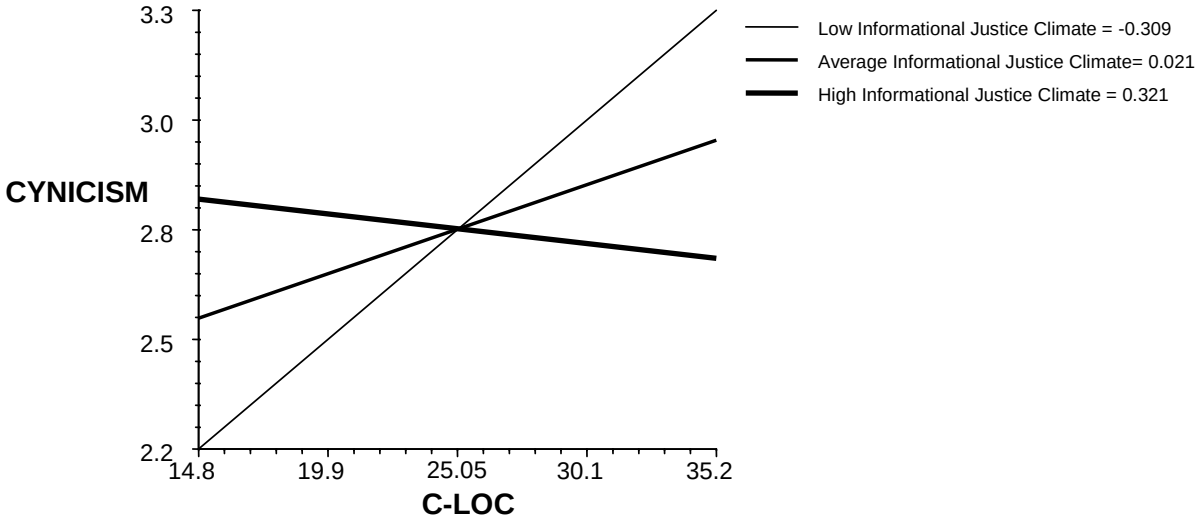

Figure 2. Moderating effect of informational justice climate on the relationship between chance locus of control and organizational cynicism

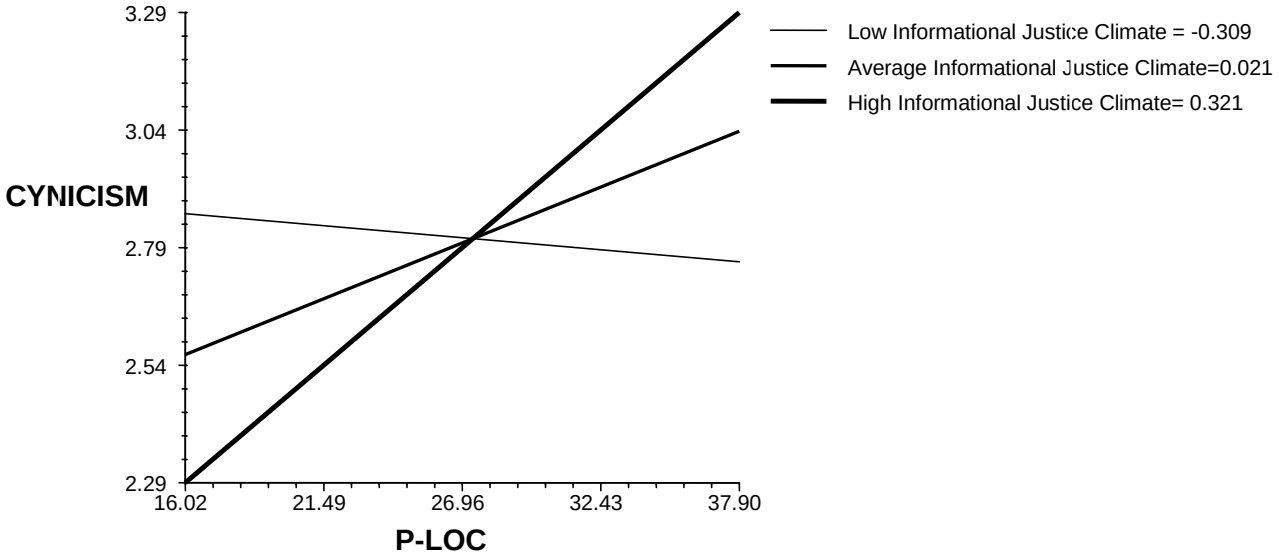

Figure 3. Moderating effect of informational justice climate on the relationship between power locus of control and organizational cynicism

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CHAPTER 5

DISCUSSION

Summary

The present dissertation consists of three studies examining the effect of group-level justice on individuals' affective and behavioral responses to unfairness in organizations. The first study (Study 1) modeled and tested the expanded affective events model of organizational mistreatment with various conflict resolution behaviors and found that group-level justice could be regarded as a precursor to the usage of conflict resolution procedures in organizations. The second study (Study 2) included negative emotional reactions to the model as mediating mechanisms linking to those behaviors, and showed that those mediating mechanisms were also moderated by group-level justice. As an exploratory attempt, the third study (Study 3) tried to examine potential long-term effects of low levels of group-level justice, especially in the relationship with organizational cynicism and individual locus of control.

The role of group-level justice on individual-level reactions can be explained as a reference for individuals' evaluation of a certain event. While group-level justice as a context feature can evoke affective reactions by rendering specific work events more or less likely, it also influence employees' reactions by triggering comparisons with set of standards. The value and expectations reflected by the pre-existing levels of group-level justice influences employee affect and attitudes, linking context features to individual-level affective and behavioral outcomes. Therefore, compared to individuals under low levels of group-level justice, those under high levels of group-

level justice expressed stronger negative emotions (anger) when facing unfairness as shown in Study 2, and engaged in more constructive behaviors to restore fairness, as shown in Study 1 and Study 2.

Considering multi-dimensions of justice perception (i.e., procedural, distributive and interactional justice), it is plausible that group-level justice can have weighted emphasis on the specific type of justice in different teams and organizations. While certain teams and organizations emphasize the distributive justice aspect, others can focus on fair procedures more than outcomes, and others can also put more emphasis on the interactional justice aspect. According to the weighted focus on the type of justice, individual employees may show a stronger reaction to a violation of the justice that has been emphasized by the group-level justice that they have experienced.

Incorporation of different fairness violation scenarios made it possible to investigate these differential effects of each facet of justice in explaining various affective and behavioral responses. For instances, Study 1showed that when individuals faced distributive fairness violations, they wanted to engage in more sensemaking under high levels of distributive justice climate as compared to those under low levels of distributive justice climate, and expressed intentions to use an appeal system more or to report to a higher-level manager under high levels of procedural justice climate. In the same vein, when individuals faced procedural fairness violations, they expressed more anger and irritation, and engaged in more sensemaking, appeal, and reporting behaviors under high levels of procedural justice climate, as it is rare for them to experience such mistreatment and those behavioral options were both trustworthy and consistent procedures in their organization.

Regarding the case of low levels of group-level justice, Study 2 hypothesized and found that individuals would appraise unfair events as repeated experiences, and thus would be expected to experience more psychological distress such as depression and anxiety, as compared to those in a group with high group-level justice. Although treated as one type of negative affective reactions, the depression and anxiety reactions should be interpreted with caution. In Study 2, it was argued that the repeated experience of unfairness under low levels of justice climate was the reason that individuals would feel depression and anxiety rather than anger or irritation. As one of feeling states, depression and anxiety can be regarded as "state affect" representing a phenomenological condition of feeling (Watson & Clark, 1984). However, anxiety is low pleasure and high mental arousal, and depression is thought of as low levels of pleasure and arousal (Warr, 1996), resulting in differential relationships with other study variables that reflect the expected arousal and pleasure dimensions (Warr, 1990). In addition, previous research that examined comparison of anxiety and depression showed that the two often have different impacts on job-related outcomes. For example, as predictors of absence from work, job-related depression and job-related anxiety were associated with absence, but the relationship between anxiety and absence can be accounted for by depression (Hardy, Woods, & Wall, 2003). Clinical literature also has shown that depressive disorders are associated with job related behaviors such as absenteeism (Kessler & Frank, 1997; Tweed, 1993). Thus, the depression component of psychological distress has a stronger effect on job-related perception or behavior such as absence than the anxiety component.

Furthermore, the causal relationship between perception of fairness and the level of depression should be carefully investigated. Tepper (2001) found that people reporting the highest levels of depression were those who experienced low levels of both procedural justice and distributive justice. Individuals who experience higher levels of either form of justice experienced significantly less depression. Spell and Arnold (2007) also examined the relationship between depression and perception of organizational justice climate and found that employees' levels of depression were lowest when collective perceptions of distributive justice and procedural justice were lowest. More recently, Lang, Bliese, Lang & Adler (2011) argued the reverse effects, whereby psychological health problems such as depression influence perceptions of organizational justice. With the analyses of longitudinal data, they found evidence that depressive symptoms lead to subsequent organizational justice perceptions (Lang, Bliese, Lang, & Adler, 2011). Although Study 2 found that people under low levels of group-justice expressed more depression facing unfairness, it is also possible that those people with depressive symptom evaluated their group-level justice lower than others. This possibility is minimized as the current study controlled for trait negative affectivity and used two different surveys when collecting independent and dependent variables at two different time points, but it cannot be completely ruled out, and further investigation is necessary.

Continuing the focus on the low levels of group-level justice, Study 3 tried to expand the affective events model of organizational mistreatment by acknowledging the role of employees' trait locus of control (Levenson, 1981) interacting with group-level justice on their effects on employees' negative attitudes such as organizational

cynicism towards workplace. Locus of control has been examined as one of the lower-order constructs of core self evaluation (Judge, Locke, & Durham, 1997) together with self-esteem, generalized self-efficacy, and emotional stability. As core self evaluation refers to fundamental appraisals about self, the examination of locus of control in relationship to the cynicism was expected to show the impacts of appraisal of a certain event or series of events on developing attitudes towards workplace. As for the main effects, individuals with high internal locus of control had lower levels of organizational cynicism than individuals with low levels of internal control, presumably because the former believed that their own efforts could produce significant changes in the way organizations act. In addition, group-level distributive justice climate was negatively associated with the individual members' levels of organizational cynicism.

Study 3 also explored potential interactions between individual-level locus of control variables and group-level justice in terms of their effects on organizational cynicism. The results showed some interesting but complex patterns of interaction. Informational justice climate significantly moderated the relationship between external sources of control and cynicism, including both power and chance locus of control but in opposite directions. While high informational justice climate attenuated the positive effects of chance locus of control, it amplified the positive effects of power locus of control on cynicism. These different moderating effects can be partly explained by the distinct nature of these two external locus of control dimensions as Levenson (1974, 1981) earlier pointed out, but further research on the nature of mechanisms through which group-level justice and individual traits interact is needed.

Procedural justice climate was also found to moderate the effects of chance locus of control on cynicism. The positive relationship between chance locus of control and cynicism was attenuated under low levels of procedural justice climate. Therefore, individuals with high chance locus of control were actually less cynical under a low procedural justice climate than under a high procedural justice climate. Although research on power and chance locus of control has been rather limited in scope, one possible explanation for this is that individual with high chance locus of control might find some leeway to abuse the unfair system under low levels of procedural justice climate.

Supporting this possibility, a recent study found that people with higher chance locus of control are more likely to engage in moral disengagement than those with lower chance locus of control, as the former can detach their own actions from the results more easily than others (Detert, Treviño, & Sweitzer, 2008). Rather than remaining cynical and helpless under low procedural justice climate, people with high chance locus of control might engage in behaviors that may be considered unethical, and these behaviors are reinforced under low procedural justice climate. As the pre-existing procedure were already unfair, it would be more difficult to find someone accountable for certain outcomes, and this reinforces the belief that individuals with high chance locus of control hold. The intention to take unethical or immoral actions was not directly examined in the current study, but the moderating effects of justice climate on the relationship between locus of control and potential behavioral reactions can be examined further.

Among many other contextual variables that might affect individuals' affective experiences in organizations, the focus throughout three studies was on the group-level justice, which may not exactly reflect organizational-level features. Thus, although the team was the unit of analysis of these studies, it is also possible that each organization may have had distinct features (e.g., a fair and transparent conflict resolution system in place or a good governance system) that could have influenced the overall level of justice climate of the organization, leading several teams in one organization to share common features. In addition, each team has different leaders with unique characteristics who maintained different dyadic relationship with each team member. Therefore, careful inclusion of organizational-level features and leadership characteristics in teams in the model can deepen the understanding of the role of group-level justice in shaping individual-level affective and behavioral reactions.

Implications and Future Research Directions

The current research tried to answer the research question about the factors that lead to different emotional and behavioral responses when employees are faced with unfairness in organizations. By focusing on the effects of group-level justice in eliciting different negative emotional reactions and behavioral choices, the present study has several theoretical implications and directions for organizations research.

Firstly, the group-level justice construct, which is more than a mere reflection of collective perception of fairness (Naumann & Bennett, 2000; Roberson & Colquitt, 2005), provides individuals with a reference point for evaluating certain events, thus leading to different types and degrees of emotional and behavioral reactions. This

added nature of group-level justice construct should be carefully validated and investigated to find potential cross-level effects on individual- or team-level outcomes.

Secondly, the nature of emotional reactions leading to different behaviors should be understood in the context of potential moderated mediation mechanisms. As reactions to unfairness, various negative emotions and subsequent behaviors may harm teams and organizations as well as individual employees themselves. While negative emotions mediate the relationship between experiences of unfairness and subsequent behaviors, the potential moderating role of group-level justice should be considered in the context of the particular instance of mistreatment.

Thirdly, regarding the choice and the use of conflict resolution behaviors, the usage or non-usage of formal conflict resolution procedures, or the choice of other remedial voice measures should be understood as a signal of high or low levels of justice climate and legitimacy and levels of trust in the system. In order to design and implement appropriate conflict resolution procedures in an organization, the existing levels of justice climate should be considered so as to understand what types of behaviors individuals actually engage in a given situation.

Next, the changing nature of group-level justice should be investigated with regard to team-level characteristics such as team tenure, team cohesion, the nature of the task and team leader characteristics, or organizational characteristics such as organizational changes. Levels of group-level justice are not static, thus the development of certain level of group-level justice might take time and changes in the levels of group-level justice would be likely. The topic on the development and

changes of collective perception of fairness with normative elements is interesting and meaningful topic for future research.

Lastly, the temporal effects of group-level justice should be investigated as well. Although exploratory and limited, the current study examined organizational cynicism as one of the long-term effects of low levels of group-justice. Organizational cynicism is just one example of many job related attitudes, and there could be many more individual-level and team-level outcomes including individual psychological distress, commitment, performance and satisfaction that are influenced by long-term effect of group-level justice. Either maintained or changing, the role of group-level justice should be investigated with temporal concerns to fully understand dynamics between individuals, teams and organization.

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APPENDIX

TIME 1 SURVEY ITEMS

Justice Climate Items (Colquitt, 2001)

The following items refer to the various characteristics in your team. Please provide your answer for each question using a 5-point scale with anchors of 1 = *to a small extent* and 5 = *to a large extent.*

Procedural justice
The following items refer to the procedures used to arrive at your outcomes ***in your team. To what extent:***

1. Have you been able to express your views and feelings during those procedures?
2. Have you had influence over the outcome arrived at by those procedures?
3. Have those procedures been applied consistently?
4. Have those procedures been free of bias?
5. Have those procedures been based on accurate information?
6. Have you been able to appeal the outcome arrived at by those procedures?
7. Have those procedures upheld ethical and moral standards?

Distributive justice
The following items refer to your outcome ***in your team. To what extent:***
1. Does your outcome reflect the effort you have put into your work?
2. Is your outcome appropriate for the work you have completed?
3. Does your outcome reflect what you have contributed to the organization?
4. Is your outcome justified, given your performance?

Interpersonal justice
The following items refer to ***your team leader. To what extent***:
1. Has (he/she) treated you in a polite manner?
2. Has (he/she) treated you with dignity?
3. Has (he/she) treated you with respect?
4. Has (he/she) refrained from improper remarks or comments?

Informational justice
The following items refer to ***your team leader. To what extent:***
1. Has (he/she) been candid in (his/her) communications with you?
2. Has (he/she) explained the procedures thoroughly?
3. Were (his/her) explanations regarding the procedures reasonable?
4. Has (he/she) communicated details in a timely manner?
5. Has (he/she) seemed to tailor (his/her) communications to individuals' needs?

Positive and Negative Affective Scale (PANAS; Watson, Clark, & Tellegen, 1988)

The following words describe different feelings and emotions. Please indicate to what extent you have felt this way during the past week (1) very slightly or not at all to (5) extremely for each of items.

1. Interested
2. Irritable
3. Distressed
4. Alert
5. Excited
6. Ashamed
7. Upset
8. Inspired
9. Strong

10. Nervous
11. Guilty
12. Determined
13. Scared
14. Attentive
15. Hostile
16. Jittery
17. Enthusiastic
18. Active
19. Proud
20. Afraid

Locus of Control (Levenson, 1974)

The following statements describe the way people think about life events. Please indicate to what extent you agree with each statement using a 6-point scale with anchors of 1 = do not agree at all and 6 = absolutely agree.

1. Whether or not I get to be a leader depends mostly on my ability.
2. To a great extent my life is controlled by accidental happenings.
3. I feel like what happens in my life is mostly determined by powerful people.
4. Whether or not I get into a car accident depends mostly on how good a driver I am.
5. When I make plans, I am almost certain to make them work.
6. Often there is no chance of protecting my personal interest from bad luck happenings.
7. When I get what I want, it's usually because I'm lucky.
8. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.
9. How many friends I have depends on how nice a person I am.
10. I have often found that what is going to happen will happen.
11. My life is chiefly controlled by powerful others.
12. Whether or not I get into a car accident is mostly a matter of luck.
13. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.
14. It's not always wise for me to plan too far ahead because many things tuen out to be a matter of good or bad fortune.
15. Getting what I want requires pleasing those people above me.
16. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.
17. If important people were to decide they didn't like me, I probably wouldn't make many friends.
18. I can pretty much determine what will happen in my life.
19. I am usually able to protect my personal interests.
20. Whether or not I get into a car accident depends mostly on the other driver.
21. When I get what I want, it's usually because I worked hard for it.
22. In order to have my plans work, I make sure that they fir in with the desires of people who have power over me.
23. My life is determined by my own actions.
24. It's chiefly a matter of fate whether or not I have a few friends or many friends.

Demographic Information (Controls)

1.	Sex	① male	② female			
2.	Age	① 20-25	② 26-30	③ 31-35	④ 36-40	⑤ 41-45
		⑥ 46-50	⑦ Older than 50			
3.	Education	①High school graduate	②2-year college graduate	③4-year university graduate	④Master degree	⑤Doctoral degree

4. Organization
   Your Team Title

5. Team size Number of people in your team _____

6. How long have you worked in your current team? _____Months

7. Team function
   ① Management ② Manufacture ③ Sales ④ R&D
   ⑤ Others _____

8. Title
   ① Junior ② Senior ③ Manager ④ Executives

9. Industry
   ① Finance ② Service ③ IT ④ Electronics ⑤ Construction
   ⑥ Retail ⑦ Textile ⑧ Chemicals ⑨ Mechanical ⑩ Others

10. Company type
    ① Private ② Public ③ Foreign ④Non-Profit ⑤Others _____

11. How long have you worked in the current organization?
    Total _____Months

TIME 2 SURVEY ITEMS

Following scenarios describe events that can happen in workplaces. Please read each scenario and provide your answers for following questions.

SCENARIO 1 [Distributive fairness violation]

Hyeon-soo has worked for 3 years as a clerical worker in a manufacturing company. Hyeon-soo's company generally conducts an annual performance evaluation. Hyeon-soo heard that a manager of Hyeon-soo's team received the highest evaluation score, as he needed it for the promotion at the end of this quarter. Although Hyeon-soo contributed significant amount of efforts to the most important project of the team from the initial stage, the success of the project was recognized as the manager's own achievement. Hyeon-soo thinks that this year's performance evaluation was not reflective of own achievement, but just a tool for favoring the one considered for the promotion.

SCENARIO 2 [Procedural fairness violation]

Sehyeon recently received an email from HR department announcing a salary freeze in the coming year and the abolition of incentives. Although it is generally known that market situation has not been so favorable, Sehyeon has never received any specific information on the company's own performance nor had any discussion on hostile situations with managers or executives. Sehyeon has been working on the important project and was expecting to receive incentives on the project by the time it finishes next year. However, Sehyeon and other team members were unilaterally notified about the elimination of incentives without any discussion on the matter.

SCENARIO 3 [Interactional fairness violation]

A team leader in Jimin's team often makes inappropriate remarks. When the leader is upset or anyone in the team makes a mistake, the leader yells at employees or makes rude and sarcastic remarks. The leader seldom provides enough explanation on the direction he gives to the team members, and is very inconsistent in the way he handles tasks. Other team members cannot figure out what kind of information the leader bases on his decision or whether the information is accurate or not. The leader would not consider any other team members' opinion in making his own decision.

(Each of the above scenarios is followed by questions below)

A. **Affective Responses** (Axtell et al., 2002)

How would you feel if you were in the position of XX (person in the scenario)?" Please indicate your probable responses on a 5-point scale ((1) Very slightly or not at all to (5) Extremely).

1. Enthusiastic
2. Optimistic
3. Cheerful
4. Depressed
5. Gloomy
6. Angry
7. Irritated
8. Miserable
9. Anxious
10. Worried
11. Calm
12. Relaxed
13. Comfortable
14. Tense

B. Fairness Evaluations

To what degree do you think the event described above is fair? Please evaluate the fairness of the event described above.

1	2	3	4	5
Very Unfair	Unfair		Fair	Very Fair

C. Behavioral Responses

What would you do if you were in the position of XX (person in the scenario)?
Please indicate the degree of engaging in the following behavioral options on a 5-point scale. (never (1) to actively pursue (5))

1. Leave the organization.
2. Appeal using grievance procedures in the organization.
3. Report to the higher level manager
4. Maintain silence and do not take any actions.
5. Talk about the event with the colleague in the organization
6. Take a revengeful action toward the one most responsible.
7. Consider engaging in a collective action.

Organizational Cynicism (Dean et al., 1998).

Please indicate to what extent you agree with each of the following statements. ((1) strongly disagree to (5) strongly agree)

1. I believe that my company says one thing and does another.
2. My company's policies, goals, and practices seem to have little in common.
3. When my company says it's going to do something, I wonder if it will really happen.
4. My company expects one thing of its employees, but rewards another.
5. I see little similarity between what my company says it will do and what it actually does.

Demographic Information (Controls)

1. Sex ③ male ④ female
2. Age ① 20-25 ② 26-30 ③ 31-35 ④ 36-40 ⑤ 41-45 ⑥ 46-50 ⑦ Older than 50
3. Education ①High school graduate ②2-year college graduate ③4-year university graduate ④Master degree ⑤Doctoral degree
4. Organization

   Your Team Title
5. Team size Number of people in your team _____
6. How long have you worked in your current team? _____Months

7. Team function

⑥ Management ⑦ Manufacture ⑧ Sales ⑨ R&D

⑩ Others _____

8. Title

⑤ Junior ⑥ Senior ⑦ Manager ⑧ Executives

9. Industry

① Finance ② Service ③ IT ④ Electronics ⑤ Construction

⑥ Retail ⑦ Textile ⑧ Chemicals ⑨ Mechanical ⑩ Others

10. Company type

② Private ② Public ③ Foreign ④Non-Profit ⑤Others _____

11. How long have you worked in the current organization?

Total _____Months